



Application for Renewal of NPDES Permit MA0020010

Distrigas of Massachusetts LLC

Everett Marine Terminal

Submitted to:

Massachusetts Department of Environmental Protection
627 Main Street
Worcester, MA 01608

Submitted by:

Distrigas of Massachusetts LLC
Everett Marine Terminal
18 Rover Street
Everett, MA 02149

May 2014

Application for Renewal of NPDES Permit MA0020010
Distrigas of Massachusetts LLC
May 2014

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FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER		T/A		C											
				S	F														
				MA0020010				D											
				1	2	13	14	15											
LABEL ITEMS				PLEASE PLACE LABEL IN THIS SPACE						GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.									
I. EPA I.D. NUMBER																			
III. FACILITY NAME																			
V. FACILITY MAILING ADDRESS																			
VI. FACILITY LOCATION																			
II. POLLUTANT CHARACTERISTICS																			
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .																			
SPECIFIC QUESTIONS				Mark "X"			SPECIFIC QUESTIONS				Mark "X"								
				YES	NO	FORM ATTACHED					YES	NO	FORM ATTACHED						
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S. ? (FORM 2A)					X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S. ? (FORM 2B)					X							
				16	17	18					19	20	21						
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)				X			D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S. ? (FORM 2D)					X							
				22	23	24					25	26	27						
E. Does or will this facility treat, store, or dispose of hazardous wastes ? (FORM 3)					X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)					X							
				28	29	30					31	32	33						
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)					X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)					X							
				34	35	36					37	38	39						
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)					X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area ? (FORM 5)					X							
				40	41	42					43	44	45						
III. NAME OF FACILITY																			
C SKIP Distrigas of Massachusetts LLC																			
15 16 - 29 30 59																			
IV. FACILITY CONTACT																			
A. NAME & TITLE (last, first, & title)																			
C 2 Frank DiLiberto, Environmental Manager																			
15 16 45 46 48 49 51 52 55																			
B. PHONE (area code & no.)																			
C 2 (617) 886-8794																			
15 16 45 46 48 49 51 52 55																			
V. FACILITY MAILING ADDRESS																			
A. STREET OR P.O. BOX																			
C 3 20 City Square, Third Floor																			
15 16 45																			
B. CITY OR TOWN																			
C 4 Charlestown																			
15 16 40 41 42 47 51																			
C. STATE																			
C 4 MA																			
15 16 40 41 42 47 51																			
D. ZIP CODE																			
C 4 02129																			
15 16 40 41 42 47 51																			
VI. FACILITY LOCATION																			
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER																			
C 5 18 Rover Street																			
15 16 45																			
B. COUNTY NAME																			
C 5 Middlesex																			
15 16 45 70																			
C. CITY OR TOWN																			
C 6 Everett																			
15 16 40 41 42 47 51 52 54																			
D. STATE																			
C 6 MA																			
15 16 40 41 42 47 51 52 54																			
E. ZIP CODE																			
C 6 02149																			
15 16 40 41 42 47 51 52 54																			
F. COUNTY CODE (if known)																			
C 6																			
15 16 40 41 42 47 51 52 54																			

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST				B. SECOND			
C	7	4	922	(specify)	Natural Gas Transmission	C	7
15	16	17	18			15	16
C. THIRD				D. FOURTH			
C	7			(specify)		C	7
15	16	17	18			15	16

VIII. OPERATOR INFORMATION

A. NAME										B. Is the name listed in Item VIII-A also the owner?	
C	8	Distrigas of Massachusetts LLC								<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
15	16									50 66	
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)										D. PHONE (area code & no.)	
F = FEDERAL S = STATE P = PRIVATE M = PUBLIC (other than federal or state) O = OTHER (specify)										(specify) A (617) 381-8500	
										15 16 17 18 19 20 21 22 23 24 25 26	

E. STREET OR P.O. BOX										
18 Rover Street										
20										
F. CITY OR TOWN					G. STATE	H. ZIP CODE	IX. INDIAN LAND			
C	B	Everett				MA	02149	Is the facility located on Indian lands?		
15	16					40 41	42 43 44 45 46 47 48 49 50 51	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)										
C	T	I	9	N	MA0020010					C	T	I	9	P	MBR-95-OPP-030R					
15	16	17	18							30	15	16	17	18						
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)										
C	T	I	9	U	N/A					C	T	I	9		N/A					
15	16	17	18							30	15	16	17	18						
C. RCRA (Hazardous Wastes)										E. OTHER (specify)										
C	T	I	9	R	N/A					C	T	I	9		N/A					
15	16	17	18							30	15	16	17	18						

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

The Distrigas of Massachusetts LLC, Everett Marine Terminal receives, stores and vaporizes liquefied natural gas (LNG) for pipeline transportation as a gas, and truck transportation as a liquid.

Note for Section XI. Map:

The topographic USGS Location Map for the Distrigas Everett Marine Terminal is attached.

Legend:

N/A: not applicable

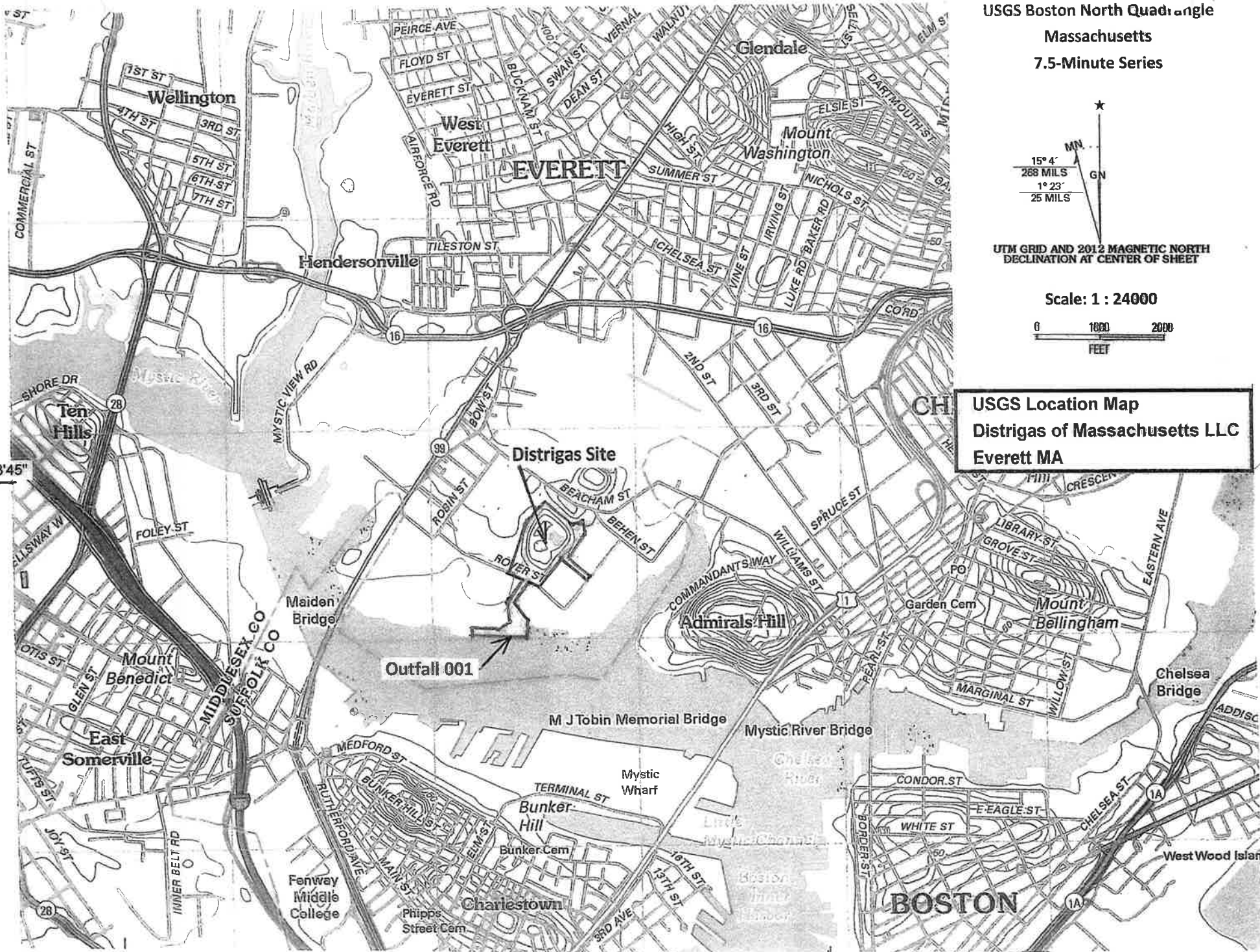
XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

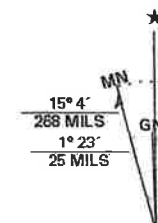
A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
Anthony Scaraggi, Vice President of Operations		5/23/14

COMMENTS FOR OFFICIAL USE ONLY

C	
15	16



USGS Boston North Quadrangle
Massachusetts
7.5-Minute Series



UTM GRID AND 2012 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Scale: 1 : 24000



USGS Location Map
Distrigas of Massachusetts LLC
Everett MA

2°03'45"

71°02'30"



Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Industrial Wastewater Management Program

Form 1 General Information and Notification

Application for Permit to Discharge to Waters of the Commonwealth

To be filed by all persons required to obtain a permit to discharge Industrial Wastewater to waters of the Commonwealth.

Note: A discharge is considered Industrial Wastewater only if the facility is one covered by the SIC Codes listed in Question 2 of the "How to Apply" guide (on the first page of this document). The accompanying instructions may help you complete this form.

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Name, address, and telephone number of facility producing the discharge:

Distrigas of Massachusetts LLC

Name

18 Rover Street

Street address

Everett

City

617-886-8794

Telephone number (including extension)

MA

State

02149

Zip Code

N/A

E-mail address (optional)

Billing address (if different):

N/A

Street/PO Box

N/A

City

N/A

State

N/A

Zip Code

Discharge Site:

18 Rover Street

Street address

Everett

City

MA

State

02149

Zip Code

Ownership:

- ☐ Individual
☐ Corporation
☐ Partnership
☒ Other

If other, please specify:

Limited Liability Company (LLC)

Status:

- ☒ Private
☐ Public
☐ Other

If other, please specify:

DEP Use Only

Application #

Date Received



Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Industrial Wastewater Management Program

Form 1 General Information and Notification

Application for Permit to Discharge to Waters of the Commonwealth

A. Facility Information (cont.)

2. Contact Person:

Give the name, title, and work telephone number of a person who is thoroughly familiar with the operation of the facility, with the facts reported in this application, and can be contacted by the Industrial Wastewater Management Program if necessary.

Frank DiLiberto

Name

Environmental Manager

Title

617-886-8794

Telephone Number (including extension)

3. Facility Status

☒ Existing ☐ Proposed

4. Does the project affect a site of historic or archeological significance, as defined in regulations of the Massachusetts Historical Commission, 950 CMR 71.00?

☐ Yes ☒ No

5. Does this project require a filing under 301 CRM 11.00, the Massachusetts Environmental Policy Act?

☐ Yes ☒ No

If yes, has a filing been made? *N/A*

☐ Yes ☐ No

6. Application Forms Needed:

Answer questions A through F to determine which additional application forms you need to submit to the Department of Environmental Protection. If you answer "Yes" to any question, you must submit this form and the supplemental form listed in the parentheses following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "No" to each question, you need not submit any of these forms.

A. Is this facility an existing or proposed publicly owned treatment works which is a discharge to surface waters of the Commonwealth? (Form 2A)

☐ Yes ☒ No ☐ Form Attached?

B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to the surface waters of the Commonwealth? (Form 2B)

☐ Yes ☒ No ☐ Form Attached?



Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Industrial Wastewater Management Program

Form 1 General Information and Notification

Application for Permit to Discharge to Waters of the Commonwealth

A. Facility Information (cont.)

- C. Does or will this facility result in a discharge to surface waters of the Commonwealth other than those described in A or B? (Form 2C)

☒ Yes ☐ No ☒ Form Attached?

- D. Is this facility an existing or proposed treatment works which results in a discharge only of treated sewage to the land surface or to the ground waters of the Commonwealth? (Form GW-A)

☐ Yes ☒ No ☐ Form Attached?

- E. Does or will this facility include a concentrated animal feeding operation or aquatic animal production facility that results in a discharge to the land surface or ground waters of the Commonwealth? (Form GW-B)

☐ Yes ☒ No ☐ Form Attached?

- F. Does or will these facility result in a discharge to the land surface or ground waters of the Commonwealth other than those described in D or E above? (Form GW-C)

☐ Yes ☒ No ☐ Form Attached?

7. Is this a RCRA facility as defined in 314 CMR 8.03?

☐ Yes ☒ No

If yes, submit the information on Form HW contained in 310 CMR 8.20 in accordance with the provisions of 314 CMR 8.08.

8. Industrial Classifications:

List, in descending order of significance, the four (4) digit standard industrial classification (SIC) codes that best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words.

SIC Code	Specify
<u>4922</u>	<u>Natural Gas Transmission</u>
A. _____	_____
B. _____	_____
C. _____	_____
D. _____	_____

Note: No application will be accepted without the SIC code number.



Massachusetts Department of Environmental Protection

Bureau of Waste Prevention

Industrial Wastewater Management Program

Form 1 General Information and Notification

Application for Permit to Discharge to Waters of the Commonwealth

A. Facility Information (cont.)

9. Facility Operator:

Give the name, as it is legally referred to, of the person, firm, public organization or other entity that operates the facility described in this application. If the facility owner is also the operator, write owner and list mailing address only if different from that listed in number 1 above.

Distrigas of Massachusetts LLC

Name

617-381-8500

N/A

Telephone Number (including extension)

E-mail address (optional)

18 Rover Street

Mailing Address

Everett

MA

02149

City

State

Zip Code

Ownership:

- ☐ Individual
☐ Partnership
☐ Corporation
☒ Other

If other, please specify:

Limited Liability Company (LLC)

Status:

- ☒ Private
☐ Public
☐ Other

If other, please specify:

10. Location of Facility:

A. Is this facility located on Native American Lands?

- ☐ Yes ☒ No

B. Provide a topographic map (USGS 1:25,000 scale 7_ Minute Topographic Series, quadrangle sheet) or maps of the area extending at least to one mile beyond the property boundaries of the facility that clearly show the following: **See the attached USGS Location Map**

- The legal boundaries of the facility;
- The location and serial number of each of your existing and proposed intake and discharge structures;
- All hazardous waste management facilities;



Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Industrial Wastewater Management Program

Form 1 General Information and Notification

Application for Permit to Discharge to Waters of the Commonwealth

A. Facility Information (cont.)

- All springs and surface water bodies in the area, plus all drinking water wells within one mile of the facility which are identified in the public record or otherwise known to you.
- If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) maps corresponding to the location.
- On each map, include the map scale, meridian arrow showing north, and latitude and longitude to the nearest whole second. On all maps of rivers, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7½ minute series map published by the U.S. Geologic Survey.

11. Nature of Business:

Briefly describe the nature of your business. Include products produced or services provided:

The Distrigas of Massachusetts LLC, Everett Marine Terminal receives, stores and vaporizes liquefied natural gas (LNG) for pipeline transportation as a gas, and trunk transportation as a liquid.

12. Water Supply Data:

A. List sources of water supply and annual water consumption for the past 5 years.

Water Sources	Year (last year first)				
	1.	2.	3.	4.	5.
1. <i>City of Everett (million gallons/year)</i>	<i>12.2</i>	<i>14.0</i>	<i>8.3</i>	<i>8.4</i>	<i>11.3</i>
2.					
3.					
Total					

B. Please show the location of your water sources on the topographic map described in paragraph 11B.

Water supply is from the City of Everett via the MWRA municipal water supply system.



Massachusetts Department of Environmental Protection

Bureau of Waste Prevention

Industrial Wastewater Management Program

Form 1 General Information and Notification

Application for Permit to Discharge to Waters of the Commonwealth

B. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I will be responsible for publication of public notice of the applicable permit proceedings identified under 314 CMR 2.06(1)(a) through (d)."

Anthony Scaraggi

Printed name of applicant

Vice President of Operations

Title

617-381-8571

Telephone Number (including extension)

[Signature]
Signature of applicant

Date Signed

Frank DiLiberto

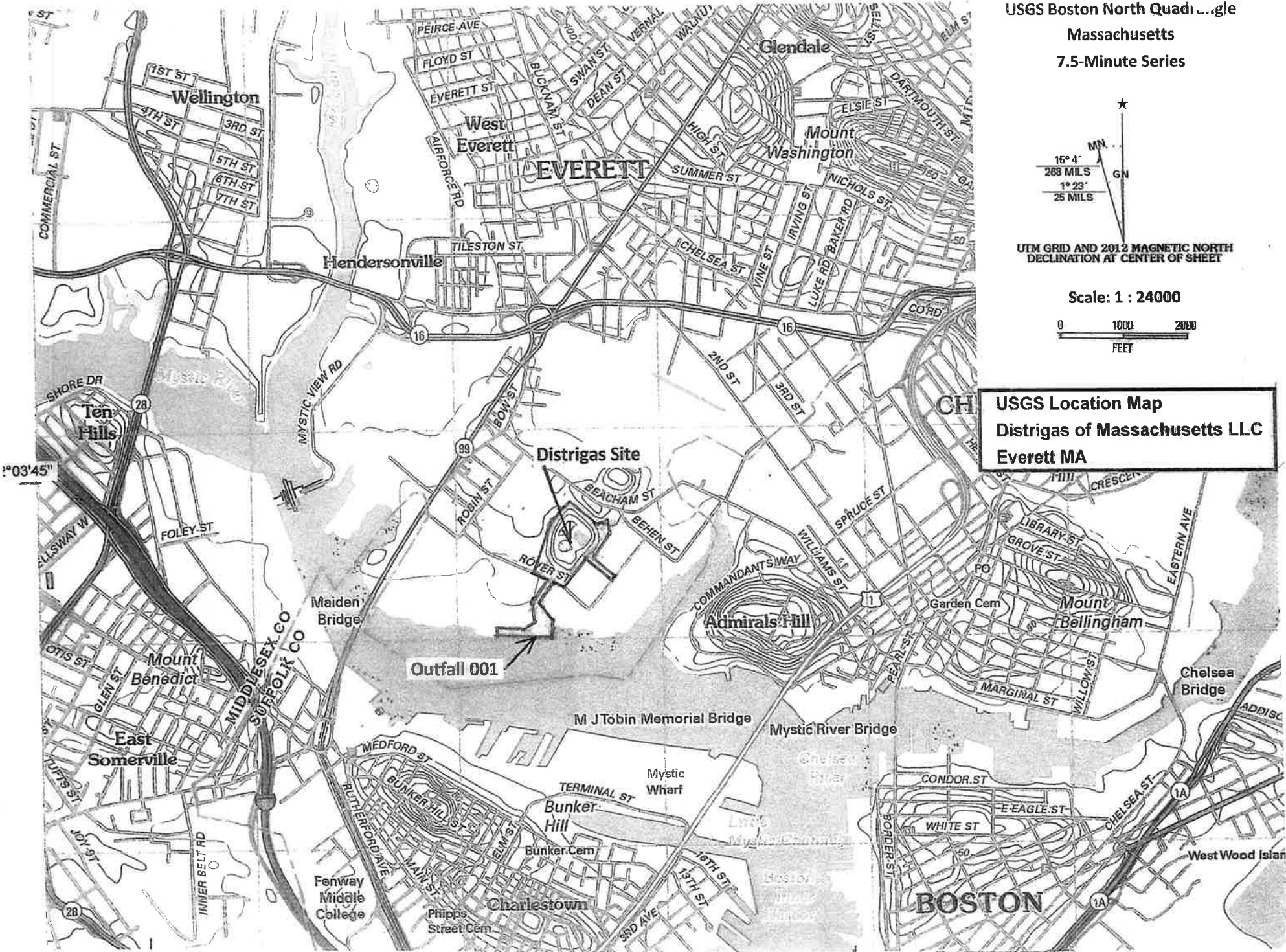
Name of Preparer

Environmental Manager

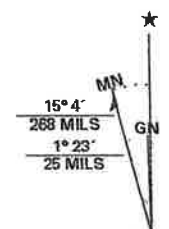
Title

617-886-8794

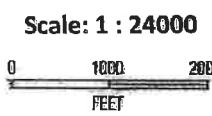
Telephone Number (including extension)



USGS Boston North Quadrangle
Massachusetts
7.5-Minute Series



UTM GRID AND 2012 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



USGS Location Map
Distrigas of Massachusetts LLC
Everett MA

EPA I.D. NUMBER (copy from Item 1 of Form 1)

MA0020010

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

Please print or type in the unshaded areas only.

FORM
2C
NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	42.00	23.00	19.00	-71.00	3.00	38.00	Mystic River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	Water condensate, LP Vaporizers	30,240 gpd (@100% load)	Neutralization	2-K	
	Water condensate, HPE Vaporizers	115,200 gpd (@ 100% load)	Neutralization	2-K	
	Testing of Fire-Water Pumps	30,000 gallons/week	None		
	Blowdown of Steam Boilers	10 gpd (@ 100% load)	None		
001	Annual maintenance, boilers and vaporizers	1 maintenance event per year, per boiler or vaporizer,	None		
		30,000 gpd max.			
	Section II.A: see the attached				
	Additional Information and line drawings in Attachments 2C-1 and 2C-2.				
	Section II.B: see the attached				
	Additional Information for a description of wastewater sources.				
	Legend:				
	LP: Low Pressure System				
	HPE: High Pressure Expansion System				
	gpd: gallons per day				

OFFICIAL USE ONLY (effluent guidelines sub-categories)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ YES (complete the following table)☐ NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		C. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
001	Water condensate, LP Vaporizers	Per demand	12	0.030	0.030	0.030 mgd	0.030 mgd	365
	Water condensate, HPE Vaporizers	Per demand	12	0.115	0.115	0.115 mgd	0.115 mgd	365
	Testing of Fire-Water Pumps	1 day/wk per pump for 30 minutes	12	0.045	0.045	0.045 mgd	0.045 mgd	104
	Blowdown, Steam Boilers	Per demand	12	0.00001	0.00001	10 gal/day	10 gal/day	365
	Annual Maintenance of Boilers and Vaporizers	1 day/yr per unit	12	0.012	0.03	0.012 mgd	0.03 mgd	14

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES (complete Item III-B)☒ NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

☐ YES (complete Item III-C)☐ NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
N/A			

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☒ YES (complete the following table)☐ NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
See the attached Additional Information and Form 2F, Section II.					

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☒ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
o-xylene carbon disulfide was not detected from sampling conducted in the 4th quarters of 2011 - 2013 (see Attachment 2C-5). However, it has been detected in prior sampling.	site contamination from former manufactured gas plant site contamination from former manufactured gas plant		

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below)☒ NO (go to Item VI-B)

N/A

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (identify the test(s) and describe their purposes below)

☒ NO (go to Section VIII)

N/A

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?


☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Alpha Analytical	Eight Walkup Drive, Westborough, MA 01581	508-898-9220	BOD COD TOC TSS Ammonia (as N) Total Nitrogen Total Phosphorus Oil and Grease pH Total Cyanide Total Residual Chlorine Bacteria (Enterococcus) EPA Priority Pollutants

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print) Anthony Scaraggi, Vice President of Operations	B. PHONE NO. (area code & no.) (617) 381-8571
C. SIGNATURE 	D. DATE SIGNED 5/23/14

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

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V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)	OUTFALL NO. 001
--	--------------------

PART A —You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
	CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS				CONCENTRATION	MASS	
a. Biochemical Oxygen Demand (BOD)	3.6	3.7					1	mg/l	kg/day			
b. Chemical Oxygen Demand (COD)	79	81					1	mg/l	kg/day			
c. Total Organic Carbon (TOC)	7.8	8.0					1	mg/l	kg/day			
d. Total Suspended Solids (TSS)	8.2	8.4					1	mg/l	kg/day			
e. Ammonia (as N)	0.618	0.63					1	mg/l	kg/day			
f. Flow	VALUE 0.534		VALUE		VALUE 0.219		17	mgd		VALUE		
g. Temperature (winter)	VALUE 13		VALUE		VALUE 11		4	°C		VALUE		
h. Temperature (summer)	VALUE 22		VALUE		VALUE 19		5	°C		VALUE		
i. pH	MINIMUM 7.4	MAXIMUM 7.4	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B — Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. <i>(if available)</i>	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE <i>(optional)</i>		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X			See									
b. Chlorine, Total Residual	X		0.04		attached				13	mg/l				
c. Color		X			Additional									
d. Fecal Coliform		X			Informa-									
e. Fluoride (16984-48-8)		X			tion									
f. Nitrate-Nitrite (as N)	X		0.20						1	mg/l				

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)						
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
g. Nitrogen, Total Organic (as N)		X																
h. Oil and Grease	X		N.D.						1	mg/l								
i. Phosphorus (as P), Total (7723-14-0)	X		0.128						1	mg/l								
j. Radioactivity																		
(1) Alpha, Total		X																
(2) Beta, Total		X																
(3) Radium, Total		X																
(4) Radium 226, Total		X																
k. Sulfate (as SO ₄) (14808-79-8)		X																
l. Sulfide (as S)		X																
m. Sulfite (as SO ₃) (14265-45-3)		X																
n. Surfactants		X																
o. Aluminum, Total (7429-90-5)		X																
p. Barium, Total (7440-39-3)		X																
q. Boron, Total (7440-42-8)		X																
r. Cobalt, Total (7440-48-4)		X																
s. Iron, Total (7439-89-6)		X																
t. Magnesium, Total (7439-95-4)		X																
u. Molybdenum, Total (7439-98-7)		X																
v. Manganese, Total (7439-96-5)		X																
w. Tin, Total (7440-31-5)		X																
x. Titanium, Total (7440-32-6)		X																

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CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)							
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
METALS, CYANIDE, AND TOTAL PHENOLS																			
1M. Antimony, Total (7440-36-0)			X			See													
2M. Arsenic, Total (7440-38-2)		X				attached													
3M. Beryllium, Total (7440-41-7)			X			Addition-													
4M. Cadmium, Total (7440-43-9)			X			al													
5M. Chromium, Total (7440-47-3)			X			Informa-													
6M. Copper, Total (7440-50-8)		X				tion													
7M. Lead, Total (7439-92-1)			X																
8M. Mercury, Total (7439-97-6)			X																
9M. Nickel, Total (7440-02-0)			X																
10M. Selenium, Total (7782-49-2)			X																
11M. Silver, Total (7440-22-4)			X																
12M. Thallium, Total (7440-28-0)			X																
13M. Zinc, Total (7440-66-6)		X																	
14M. Cyanide, Total (57-12-5)		X																	
15M. Phenols, Total			X																
DIOXIN																			
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS															

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS		a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – VOLATILE COMPOUNDS																	
1V. Accrolein (107-02-8)			X														
2V. Acrylonitrile (107-13-1)			X														
3V. Benzene (71-43-2)		X															
4V. Bis (Chloro- methyl) Ether (542-88-1)			X														
5V. Bromoform (75-25-2)			X														
6V. Carbon Tetrachloride (56-23-5)			X														
7V. Chlorobenzene (108-90-7)			X														
8V. Chlorodi- bromomethane (124-48-1)			X														
9V. Chloroethane (75-00-3)			X														
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X														
11V. Chloroform (67-66-3)			X														
12V. Dichloro- bromomethane (75-27-4)			X														
13V. Dichloro- difluoromethane (75-71-8)			X														
14V. 1,1-Dichloro- ethane (75-34-3)			X														
15V. 1,2-Dichloro- ethane (107-06-2)			X														
16V. 1,1-Dichloro- ethylene (75-35-4)			X														
17V. 1,2-Dichloro- propane (78-87-5)			X														
18V. 1,3-Dichloro- propylene (542-75-6)			X														
19V. Ethylbenzene (100-41-4)		X															
20V. Methyl Bromide (74-83-9)			X														
21V. Methyl Chloride (74-87-3)			X														

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V. Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X												
2A. 2,4-Dichlorophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (105-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachlorophenol (87-86-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-05-2)			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVR. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X												
2B. Acenaphthylene (208-96-8)			X												
3B. Anthracene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo (a) Anthracene (56-55-3)		X													
6B. Benzo (a) Pyrene (50-32-8)			X												
7B. 3,4-Benzo- fluoranthene (205-99-2)			X												
8B. Benzo (ghi) Perylene (191-24-2)		X													
9B. Benzo (k) Fluoranthene (207-08-9)			X												
10B. Bis (2-Chloro- ethoxy) Methane (111-91-1)			X												
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)			X												
12B. Bis (2- Chloroisopropyl) Ether (102-80-1)			X												
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)			X												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X												
15B. Butyl Benzyl Phthalate (85-68-7)			X												
16B. 2-Chloro- naphthalene (91-58-7)			X												
17B. 4-Chloro- phenyl Phenyl Ether (7005-72-3)			X												
18B. Chrysene (218-01-9)		X													
19B. Dibenzo (a,h) Anthracene (53-70-3)			X												
20B. 1,2-Dichloro- benzene (95-50-1)			X												
21B. 1,3-Di-chloro- benzene (541-73-1)			X												

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1)	(2) MASS	(1)	(2) MASS	(1)	(2) MASS				(1)	(2) MASS		
				CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS				CONCENTRATION	(2) MASS		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																
22B. 1,4-Dichloro- benzene (106-46-7)			X													
23B. 3,3-Dichloro- benzidine (91-94-1)			X													
24B. Diethyl Phthalate (84-66-2)			X													
25B. Dimethyl Phthalate (131 -11-3)			X													
26B. Di-N-Butyl Phthalate (84-74-2)			X													
27B. 2,4-Dinitro- toluene (121-14-2)			X													
28B. 2,6-Dinitro- toluene (606-20-2)			X													
29B. Di-N-Octyl Phthalate (117-84-0)			X													
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)			X													
31B. Fluoranthene (206-44-0)		X														
32B. Fluorene (86-73-7)			X													
33B. Hexachloro- benzene (118-74-1)			X													
34B. Hexachloro- butadiene (87-68-3)			X													
35B. Hexachloro- cyclopentadiene (77-47-4)			X													
36B Hexachloro- ethane (67-72-1)			X													
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X													
38B. Isophorone (78-59-1)			X													
39B. Naphthalene (91-20-3)		X														
40B. Nitrobenzene (98-95-3)			X													
41B. N-Nitro- sodimethylamine (62-75-9)			X													
42B. N-Nitrosodi- N-Propylamine (621-64-7)			X													

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																
43B. N-Nitro- sodiphenylamine (86-30-6)			X													
44B. Phenanthrene (85-01-8)		X														
45B. Pyrene (129-00-0)		X														
46B. 1,2,4-Trī- chlorobenzene (120-82-1)			X													
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (319-85-7)			X													
4P. γ-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4'-DDT (50-29-3)			X													
8P. 4,4'-DDE (72-55-9)			X													
9P. 4,4'-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α-Endosulfan (115-29-7)			X													
12P. β-Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													
15P. Endrin Aldehyde (7421-93-4)			X													
16P. Heptachlor (76-44-8)			X													

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1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICIDES <i>(continued)</i>															
17P. Heptachlor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

**NPDES Form 2C
Additional Information**

Form 2C, Section II.A

The water balance for the plant is presented in Attachment 2C-1. The line diagram of the wastewater collection system is presented in Attachment 2C-2.

Form 2C, Section II.B

Discharges from process wastewater, storm water runoff, and sanitary sewerage are described below.

I. Process Wastewater

A. Water Condensate from the Low Pressure (LP) Vaporizers

The Low Pressure (LP) Vaporizers are submerged combustion vaporizers, direct-fired with natural gas. There are three LP Vaporizers manufactured by the Ryan Company. The design of these units is such that water in the combustion gas is condensed in the water bath of the vaporizers and drained off as it is generated. This water is drained into the Site's storm drainage system.

This condensate is clean water with a maximum flow of approximately 21 gallons per minute (gpm) for three units operating at 100% capacity. Sodium bicarbonate is added to the water bath to neutralize the condensate generated. The discharge mixes with other Site wastewater flows prior to discharge to the Mystic River through Outfall No. 001. The amount of condensate flow varies with the rate of firing of the LP Vaporizers. The manual addition of sodium bicarbonate to the water bath of vaporizer has been graded as Industrial Grade 1 by the Board of Certification of Wastewater Treatment Facility Operators. The "Operation & Maintenance Manual and Staffing Plan for Operation of Wastewater Treatment Facility for Control of Water Bath pH for Ryan Vaporizers" is contained in Attachment 2C-3.

B. Water Condensate from the High Pressure Expansion (HPE) Vaporizers

The High Pressure Expansion (HPE) Vaporizers are submerged combustion vaporizers, direct-fired with natural gas. There are four HPE Vaporizers manufactured by the Kaldair Company. The design of these units is such that water in the combustion gas is condensed in the water bath of the vaporizers and drained off as it is generated. This water is drained into the Site's storm drainage system.

This condensate is clean water with a maximum flow of approximately 80 gpm for four units operating at 100% load. Sodium carbonate is used to neutralize the condensate generated. This water mixes with other Site wastewater flows prior to discharge to the Mystic River through Outfall No. 001. The amount of condensate flow varies with the rate of firing of the HPE Vaporizers.

C. Fire-Water Pump Testing

The Site has two 1,500 gpm engine driven emergency fire-water pumps. Operational safety procedures require that each pump operate weekly for approximately 30 minutes. The pumps are tested individually on different week days. During the test, each pump discharges to the Site storm drain system. The water supply for the fire protection system is from the City of Everett water supply system and is not treated.

D. Steam Boiler Blow-Down

Two 100 hp steam boilers are used to de-ice LNG piping and equipment. The Cleaver-Brooks Boilers have a small blow down of 10 gallons per day (gpd) when operating at 100% capacity for both boilers combined. Sodium chloride is used for water softening and coil guard is used for corrosion protection.

E. Hot Water Heater and Vaporizer Annual Maintenance Draining

Hot water heaters and vaporizers are drained annually for routine maintenance. Hot water heaters consist of two High Pressure (HP) Johnston hot water heaters, and five Medium Pressure (MP) Cleaver-Brooks hot water heaters. The vaporizers consist of three LP Vaporizers and four HPE Vaporizers. The wastewater is discharged into the storm drainage system at a rate of: 10,000 gpd for each Johnston heater; 3,500 gpd for each Cleaver Brooks heater; 3,700 gpd for each LP Vaporizer; and 30,000 gpd for each HPE Vaporizer. Each heater / vaporizer is drained once per year lasting approximately two to three hours. The drainage for each heater / vaporizer is scheduled on separate days. Sodium nitrate is injected into the heaters for corrosion control.

II. Storm Water Runoff

A. Non-Containment Areas

Rainfall runoff from buildings and yard areas outside of LNG containment areas is collected by catch basins and flows, by gravity, to the Mystic River via the Site storm drainage system (Outfall No. 001).

B. Containment Areas

The Site has three LNG containment areas which are served by sump pumps. These are:

- the dike containment area for the two LNG tanks;
- the LNG truck scale area; and
- the LP/MP Vaporizer area.

The dike for the LNG tanks is served by three sump pumps, each located in a concrete sub-impoundment. The areas are designated, North Basin, South Basin and LNG Basin. These pumps discharge to the storm drainage system via above ground piping. The arrangement of these sumps is such that only surface runoff is collected. The system is designed to exclude groundwater from the sumps.

The truck scale area and concrete sub-impoundment has three sump pumps that discharge directly to the storm drainage system. The LP/MP Vaporizer area has one sump pump within a concrete sub-impoundment that is piped to discharge to a permeable surface within the dike for the LNG tanks.

C. Site Catch Basins

The flows described in Section II.B above, originate within the plant process area. The drainage system also receives storm water from catch basins which are outside of the LNG containment areas. Storm water from these areas is collected and flows by gravity to the Mystic River through Outfall No. 001. The Storm Drain System Plan is presented in Attachment 2C-4.

D. Detention Basin

In order to provide a final level of protection to the Mystic River prior to discharge, a concrete basin is installed in the drain line downstream of the last catch basin, and upstream of the Boston Sand and Gravel storm drain connection. This basin has two internal baffles forming three chambers to trap sediment and "floaters". Quarterly sampling is conducted from the third chamber of the detention basin (SD-6)

III. Sanitary Sewerage

A limited quantity of domestic wastewater is generated by employees of the operating plant. The plant operates 365 days a year, 24 hour per day. An average of approximately 879 gpd of sanitary wastewater is generated based on the Massachusetts State Environmental Code Title 5 factors used to estimate sewage flow. This limited flow is accommodated by the existing City of Everett municipal sewer collection system.

Form 2C, Section IV

Prior to the Distrigas liquefied natural gas (LNG) operations in Everett, MA, a manufactured gas plant (MGP) occupied the Site. Contaminates associated with MGP operations (cyanide) have been found in the storm water discharge. In accordance with the NPDES Permit, site-specific best management practices (BMPs) were implemented to control, reduce, and/or eliminate cyanide concentrations in the storm drain system/discharge. Investigation of groundwater infiltration and cyanide concentrations in the storm drain system ("*Storm Drain Evaluation Report (Special Study)*", dated November 19, 2010) (see Appendix B) indicated that the majority of total cyanide flux in the storm drain is attributed to groundwater infiltration along the eastern branch of the storm drain system.

To prevent/minimize the infiltration of groundwater, a cured in-place pipe lining was installed in the eastern branch of the storm drain system. The pipe lining, approximately 1,300 feet in length, was installed from the start point of the eastern branch of the storm drain at catch basin DMH-137, to the catch basin at CB-B. The wall and basin of each manhole and catch basin from DMH-137 to CB-B were lined with grout to prevent/minimize groundwater infiltration. The project, involving the rebuilding of manhole/catch basin inverts, installing pipe lining, and the grouting of manholes/catch basins was completed on June 18, 2011. The evaluation of effectiveness of the BMPs was completed and documented in the report "*Storm Drain (Special Study) Evaluation of Best Management Practices*", dated November 21, 2013 (see Appendix C).

The LP/MP Containment is a concrete impoundment area in event of a LNG spill from the low pressure and medium pressure vaporization areas. Storm water collected in the containment was discharged to the storm drain system via a sump pump. Due to suspected groundwater infiltration through the floor of the containment, the sump pump discharge to the storm drain was disconnected on April 24, 2013 to prevent the potential introduction of pollutants to the storm drain. To minimize groundwater infiltration to the containment area, grout injection was conducted to seal the concrete floor of the containment. The sump pump discharge for the LP/MP Containment was rerouted to a permeable surface within the dike for the LNG storage tanks.

Form 2C, Section V

Prior to the Distrigas liquefied natural gas (LNG) operations in Everett, MA, a manufactured gas plant (MGP) occupied the Site. Historical impacts related to the MGP operation have been documented and addressed under the Massachusetts Contingency Plan (MCP). Issues related to the findings under the MCP guidelines are the responsibility of Boston Gas Company (d/b/a National Grid).

Storm water runoff generated at the Site may come in contact with soils remaining from the former MGP operations and the constituents of concern listed below. It is not expected that any of the constituents of concern have been, or will be generated by Distrigas' operations.

The following is the list of constituents, which could be present in the storm water discharge:

- Total Arsenic, Zinc, Copper;
- Total Cyanide;
- SVOCs; and
- VOCs (BTEX).

In accordance with NPDES Permit MA0020010, quarterly sampling is conducted for both rain and dry weather events. Sampling for EPA priority pollutants is conducted annually in the fourth quarter during a rain event. Sample results from the 1st quarter of 2010 to the 1st quarter of 2014 are presented in Attachment 2C-5.

Form 2C, Section V, Part A

Test results for BOD, COD, TOC, TSS, Ammonia (as N) and pH are from sampling conducted during dry weather on April 30, 2014. The laboratory report from Alpha Laboratory is contained in Attachment 2C-6.

Flow: maximum and average flow rate in million gallons per day (mgd) are based on sampling conducted (1st quarter 2010 – 1st quarter 2014) during dry weather in accordance with NPDES Permit MA0020010.

Temperature (winter): maximum and average sample temperatures are based on sampling conducted in the months of December, January and February (1st quarter 2010 – 1st quarter 2014) during dry weather in accordance with NPDES Permit MA0020010.

Temperature (summer): maximum and average sample temperatures are based on sampling conducted in the months of June, July and August (1st quarter 2010 – 1st quarter 2014) during dry weather in accordance with NPDES Permit MA0020010.

Form 2C, Section V, Part B

Total Residual Chlorine: based on sampling conducted during rain events in accordance with NPDES Permit MA0020010.

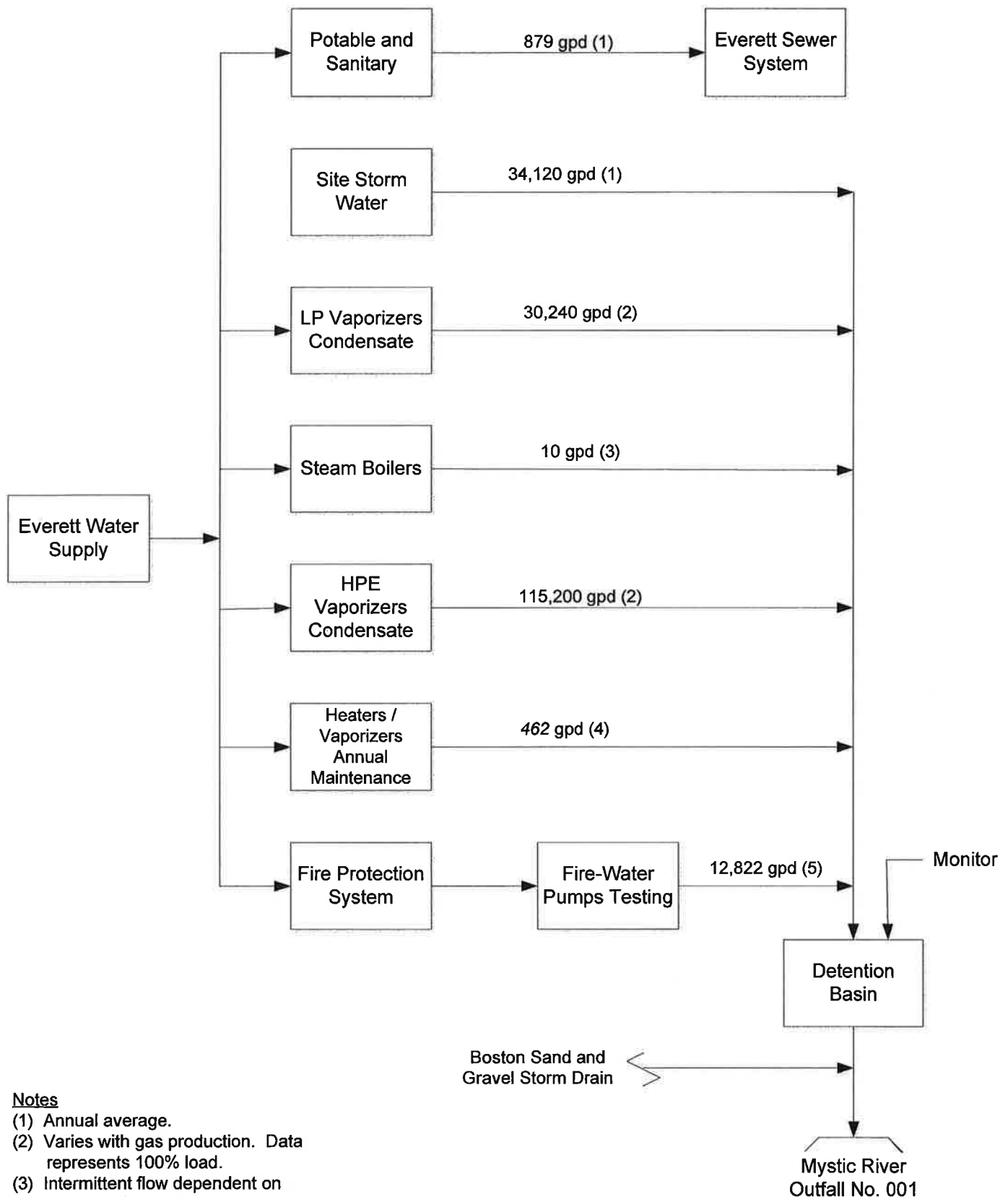
Nitrate-Nitrite: based on sampling during a rain event on April 23, 2014. Laboratory results are attached to Form 2F (Attachment 2F-5). Nitrates-nitrites are believed to be present in a vaporizer condensate due to the passage of combustion gases through the water bath of the vaporizers.

Oil and Grease, and Total Phosphorus: based on sampling during a rain event on April 23, 2014. Laboratory results are attached to Form 2F (Attachment 2F-5).

Application for Renewal of NPDES Permit MA0020010
Distrigas of Massachusetts LLC
NPDES Form 2C
Additional Information
May 2014

Form 2C, Section V, Part C

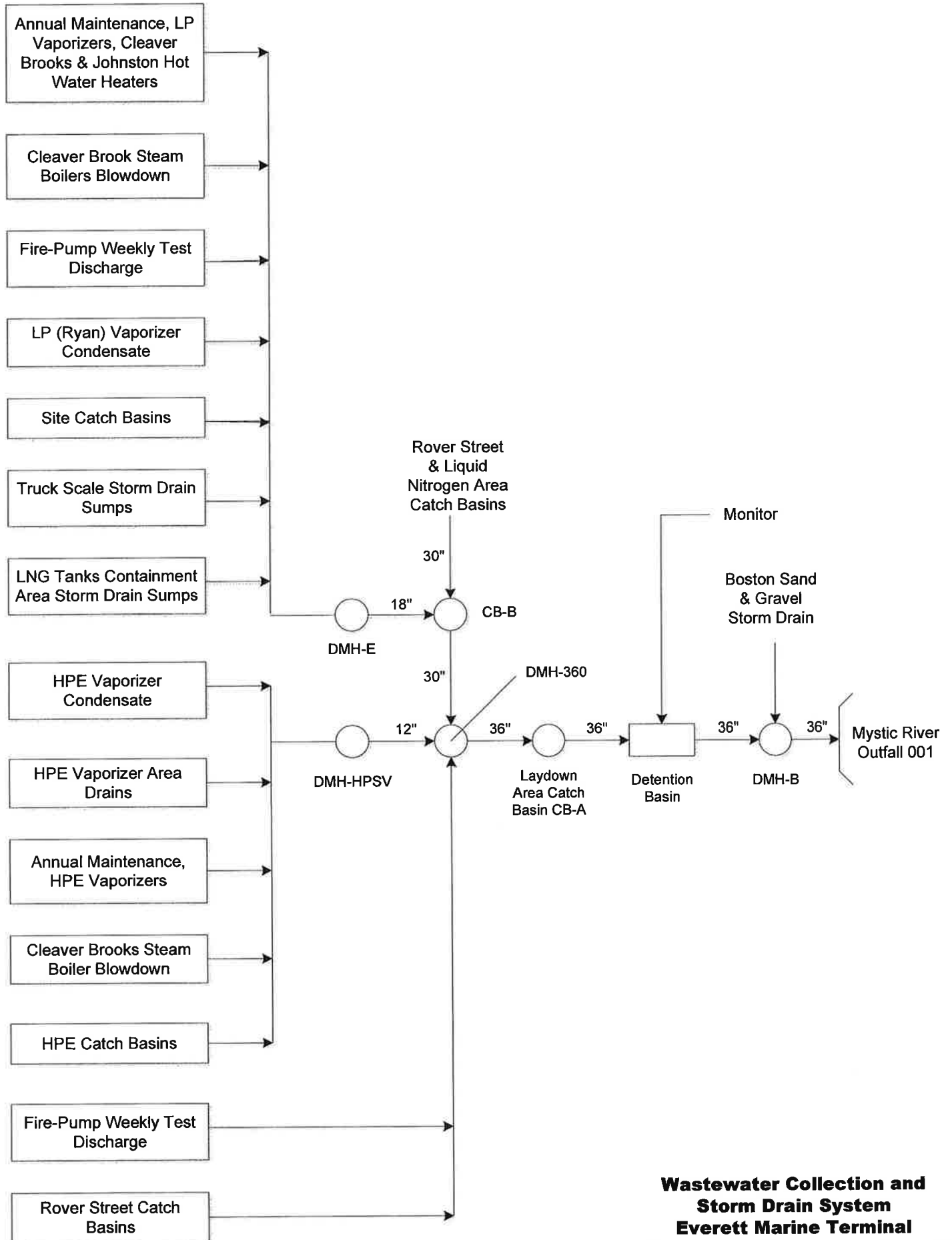
The Distrigas Everett Marine Terminal is not a Primary Industry. Sampling for EPA priority pollutants is conducted annually in the fourth quarter during a rain event in accordance with NPDES Permit MA0020010. Quarterly sample results are presented in Attachment 2C-5.



Notes

- (1) Annual average.
- (2) Varies with gas production. Data represents 100% load.
- (3) Intermittent flow dependent on steam boiler load. Data represents 100% load.
- (4) Annual average. Intermittent flow for the annual maintenance of boilers and vaporizers. Each boiler and vaporizer are drained once per year.
- (5) Annual average. Intermittent flow for the weekly testing of the emergency fire-water pumps.

**Plant Water Balance
Everett Marine Terminal
Distrigas of Massachusetts LLC**



**Wastewater Collection and
Storm Drain System
Everett Marine Terminal
Distrigas of Massachusetts LLC**

Attachment 2C-3

**Operation & Maintenance Manual and Staffing Plan for
Operation of Wastewater Treatment Facility for
Control of Water Bath pH for Ryan Vaporizers**

**OPERATION & MAINTENANCE MANUAL AND
STAFFING PLAN FOR OPERATION OF
WASTEWATER TREATMENT FACILITY**

{314 CMR 12.04(1) and 12.04(3)}

Control of Water Bath pH for Ryan Vaporizers

**Distrigas of Massachusetts LLC
Everett Marine Terminal
18 Rover Street
Everett, MA 02149**

**Revision 1
December 2013**

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1.0 OPERATION AND MAINTENANCE MANUAL

1.1 Introduction

This Operation and Maintenance (O&M) Manual contains the information necessary for proper operation for pH control of the water bath for the Ryan Vaporizers. The O&M Manual was prepared in accordance with the requirements contained in paragraph 12.04(1) of Massachusetts regulation 314 CMR 12.00.¹ Sections 1.1 through 1.11 correspond to paragraphs 12.04(1)(a) through 12.04(1)(k) of 310 CMR 12.00. The pH control of the vaporizer water bath is a wastewater treatment facility process which requires operation by a Certified Wastewater Treatment Operator.

1.2 Permits and Standards

Storm water including neutralized water bath overflow from the Ryan Vaporizers is discharged to the Mystic River through Outfall 001 under authorization of National Pollutant Discharge Elimination System (NPDES) Permit No. MA0020010.² Applicable NPDES discharge limitations are:

NPDES Discharge Limitations

pH Range (SU):	6.5 – 8.5
Total Suspended Solids (TSS):	<100 mg/l

Storm water discharge is monitored on a quarterly basis in accordance with the NPDES permit. Monitoring results and compliance status are reported to the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection Agency (EPA) in Discharge Monitoring Reports (DMRs).

No other permits or standards apply to the discharge from the Ryan Vaporizers.

1.3 Description, Operation and Control of Wastewater Treatments Facilities

Distrigas operates pH control processes for Ryan Vaporizers #71, 72 and 73. The vaporizers are submerged combustion vaporizers (SCVs) for regasifying liquefied natural gas (LNG). SCVs are indirect-fired heat exchangers with the burner and heat exchanger contained in a single vessel. A water bath is used as the heat transfer media with LNG flowing through a tube coil immersed in the water bath. The water bath is heated by a natural gas-fired burner with the combustion products discharged directly into the water bath. The condensing water vapor from the submerged combustion process results in a net production of water in the water bath, and acids are produced from carbon dioxide and nitrogen oxides in the combustion products. To

¹ 314 CMR 12.00: Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges.

² NPDES Permit No. MA0020010, September 28, 2009.

counter-act the build-up and effects of acids, sodium bicarbonate is added to control the pH of the water bath. Neutralized excess bath water from the SCV is drained to the site storm drain system which discharges to the Mystic River.

The pH control process is graded as an Industrial Class 1 wastewater treatment facility, and requires operation by a certified Grade 1 Operator.³ Operations for pH control system are conducted manually by adding sodium bicarbonate to the vaporizer water bath. During periods when the Ryan Vaporizers are operating, the pH of the water bath is checked daily. A sample of water is drawn from the water bath and the pH is measured. If the pH is not within the neutral range, approximately 16 to 20 ounces of sodium carbonate are added so that the water bath is maintained at a pH of approximately 7. After allowing time for the sodium carbonate to mix in the water bath, the pH is checked. Bags of sodium carbonate are stored indoors in a dry environment.

1.4 Description, Operation and Control of Sludge Handling Facilities

Distrigas does not operate any sludge handling facilities. Therefore this section does not apply.

1.5 Personnel

The pH control process shall be operated by a Certified Wastewater Treatment Operator during each working shift when the Ryan Vaporizers are operating. At a minimum, Distrigas Operators shall be certified as a Grade 1 Operator. Distrigas Operators shall obtain certification and maintain certification in accordance with 257 CMR 2.00.⁴

1.6 Sampling and Laboratory Analysis

During periods when the Ryan Vaporizers are operating, daily periodic operating checks include checking the pH of the water bath as addressed in Operating Procedure EMT-7.⁵ A sample of water is drawn from the water bath and the pH is measured (using a pH test kit).

As discussed in Section 1.2, storm water discharge, including discharge from the Ryan Vaporizers is monitored on a quarterly basis at several storm drain monitoring locations in accordance with the NPDES permit. Quarterly sampling results (Discharge Monitoring Reports) are reported to the EPA and DEP.

1.7 Records and Reporting

Records of operations of the pH control process shall be maintained. During periods when the Ryan Vaporizers are operating, records shall be maintained of: adding sodium bicarbonate to the

³ Board of Certification of Wastewater Treatment Facility Operators, grading of wastewater treatment facility, letter from Thomas Bienkiewicz of the DEP, December 20, 2006.

⁴ 257 CMR 2.00: Certification of Operators of Wastewater Treatment Facilities.

⁵ Distrigas Operating Procedures Manual, EMT-7: Vaporizer Operation.

water bath, and results of pH measurements. This documentation shall include the Ryan Vaporizer ID number (#71, 73 or 73) for which the work was performed, and the date and time of the work.

Records shall be available to the DEP upon request. There are no other reporting requirements. Records shall be maintained for a period of at least three years.

1.8 Maintenance

Operations for pH control are conducted manually by adding sodium bicarbonate to the vaporizer water bath. Bags of sodium carbonate are stored indoors in a dry environment. There are no other specific maintenance activities for the pH control process. The Ryan Vaporizers are maintained under a scheduled preventative maintenance program in accordance with the Distrigas Maintenance Procedures Manual. When operating, the Ryan Vaporizers including the pH control process are checked daily as described in Section 1.3.

1.9 Emergency Operating and Response Program

There are no significant emergency operating and response issues associated with operation of the pH control process. Extensive emergency and response procedures for the facility are established and described in Distrigas Emergency Procedures Manual. Emergency procedures for the Ryan Vaporizers are addressed in Distrigas Emergency Procedure EMT-10E.⁶ Operations/Maintenance personnel are trained in the use of equipment through both the existing formal training program and extensive on-the-job experience.

1.10 Safety

Operation of the pH control process is conducted manually by adding sodium bicarbonate to the vaporizer water bath. No significant hazards are associated with the use of sodium bicarbonate. Sodium bicarbonate is chemically stable and not combustible. Sodium carbonate is stored indoors in a dry environment. The MSDS for sodium bicarbonate is contained in Appendix A.

1.11 Utilities

No utilities are associated with the pH control process. Therefore this section does not apply.

2.0 STAFFING PLAN

This Staffing Plan describes the qualification of personnel necessary to ensure proper operation of the pH control process for the Ryan Vaporizers. The plan was prepared in accordance with the requirements contained in paragraph 12.04(3) of Massachusetts regulation 314 CMR 12.00. The Sections 2.1 and 2.2 address the content requirements for this Staffing Plan as required

⁶ Distrigas Emergency Procedures Manual EMT-10E: Emergency at Ryan Vaporizers.

under paragraphs 12.04(3)(a) through 12.04(3)(f) of 314 CMR 12.00. This Staffing Plan shall be updated every two years.

2.1 Operating Schedule and Personnel

The Distrigas facility is staffed 24 hours per day, 365 days per week. Water bath pH control for the Ryan Vaporizers is operated by the Operations staff consisting of an Operations Manager⁷, Shift Supervisor and Operators. Any time the Ryan Vaporizers including the pH control process are operating, at least one Certified Waste Water Treatment Operator shall be working.

A list of Certified Wastewater Treatment Operators is presented in Appendix B. A summary of Operations staffing for the facility in accordance with information required under 314 CMR 12.04(3)(a) through (e) is presented below:

Facility Operational Days per Week:	7
Facility Operational Hours per Week:	168
Operator Shifts per Day:	2
Operators per Shift:	4 (1 Certified Wastewater Treatment Operator, Grade 1, is required during periods when the Ryan Vaporizers including the pH control process are operating)
Saturday, Sunday and Holiday Staff Coverage:	Full-Time

The pH control process is integral to operation of each Ryan Vaporizer and operates only when that vaporizer operates. During periods when a Ryan Vaporizer is not operating, there is no discharge from the vaporizer water bath, and the pH control system is not operated. Operation of the Ryan Vaporizers depends on the demand for natural gas. Each Ryan Vaporizer typically operates approximately 1,000 to 1,500 hours per year.

As discussed in Section 1.5 of the O&M Manual, the pH control process shall be operated by Grade 1 Certified Wastewater Treatment System Operators. Distrigas Operators are well educated and highly trained in LNG marine terminal operations which are actively regulated by the Federal Energy Regulatory Commission (FERC), the Department of Transportation (DOT), the United States Coast Guard, as well as the EPA and DEP.

2.2 Emergency Operating Personnel

There are no significant emergency operating and response issues associated with operation of the pH control process. The facility is staffed 24 hours a day, 365 days per year and is trained in emergency and response procedures as described in the Distrigas Emergency Procedures Manual.

⁷ The Operations Manager works a daytime 8-hour shift, Monday through Friday.

O & M Manual and Staffing Plan for Operation of Wastewater Treatment Facility -
Control of Water Bath pH for Ryan Vaporizers
Rev. 1, December 2013

APPENDIX A
SODIUM BICARBONATE MSDS

Univar USA

007 08/18/06 SODIUM BICARBONATE

PRODUCT NAME: SODIUM BICARBONATE
MSDS NUMBER: MZS2954
DATE ISSUED: 7/11/2006
SUPERSEDES: 6/4/2004
ISSUED BY: 008614

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SODIUM BICARBONATE

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1. PRODUCT IDENTIFICATION

SYNONYMS: SODIUM HYDROGEN CARBONATE; SODIUM ACID CARBONATE; BAKING
SODA; BICARBONATE OF SODA
CAS NO: 144-55-8
MOLECULAR WEIGHT: 84.01
CHEMICAL FORMULA: NAHCO3

Distributed by:
Univar USA Inc.
17425 NE Union Hill Road
Redmond, WA 98052
425-889-3400

=====

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO	PERCENT	HAZARDOUS
SODIUM BICARBONATE	144-55-8	99 - 100%	NO

=====

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

AS PART OF GOOD INDUSTRIAL AND PERSONAL HYGIENE AND SAFETY PROCEDURE, AVOID
ALL UNNECESSARY EXPOSURE TO THE CHEMICAL SUBSTANCE AND ENSURE PROMPT
REMOVAL FROM SKIN, EYES AND CLOTHING.

POTENTIAL HEALTH EFFECTS

INHALATION:

HIGH CONCENTRATIONS OF DUST MAY CAUSE COUGHING AND SNEEZING.

INGESTION:

EXTREMELY LARGE ORAL DOSES MAY CAUSE GASTROINTESTINAL DISTURBANCES.

SKIN CONTACT:

NO ADVERSE EFFECTS EXPECTED.

EYE CONTACT:

CONTACT MAY CAUSE MILD IRRITATION, REDNESS, AND PAIN.

CHRONIC EXPOSURE:

NO INFORMATION FOUND.

AGGRAVATION OF PRE-EXISTING CONDITIONS:
NO INFORMATION FOUND.

4. FIRST AID MEASURES

INHALATION:
REMOVE TO FRESH AIR. GET MEDICAL ATTENTION FOR ANY BREATHING DIFFICULTY.

INGESTION:
GIVE SEVERAL GLASSES OF WATER TO DRINK TO DILUTE. IF LARGE AMOUNTS WERE SWALLOWED, GET MEDICAL ADVICE.

SKIN CONTACT:
NOT EXPECTED TO REQUIRE FIRST AID MEASURES.

EYE CONTACT:
WASH THOROUGHLY WITH RUNNING WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS.

5. FIRE FIGHTING MEASURES

FIRE:
NOT CONSIDERED TO BE A FIRE HAZARD.

EXPLOSION:
NOT CONSIDERED TO BE AN EXPLOSION HAZARD.

FIRE EXTINGUISHING MEDIA:
USE ANY MEANS SUITABLE FOR EXTINGUISHING SURROUNDING FIRE.

SPECIAL INFORMATION:
USE PROTECTIVE CLOTHING AND BREATHING EQUIPMENT APPROPRIATE FOR THE SURROUNDING FIRE.

6. ACCIDENTAL RELEASE MEASURES

VENTILATE AREA OF LEAK OR SPILL. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AS SPECIFIED IN SECTION 8. SPILLS: SWEEP UP AND CONTAINERIZE FOR RECLAMATION OR DISPOSAL. VACUUMING OR WET SWEEPING MAY BE USED TO AVOID DUST DISPERSAL. SMALL AMOUNTS OF RESIDUE MAY BE FLUSHED TO SEWER WITH PLENTY OF WATER.

7. HANDLING AND STORAGE

KEEP IN A WELL CLOSED CONTAINER STORED UNDER COLD TO WARM CONDITIONS, 2 TO 40 C, (36 TO 104F). PROTECT AGAINST PHYSICAL DAMAGE. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE THEY RETAIN PRODUCT RESIDUES (DUST, SOLIDS); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:
NONE ESTABLISHED.

VENTILATION SYSTEM:

IN GENERAL, DILUTION VENTILATION IS A SATISFACTORY HEALTH HAZARD CONTROL FOR THIS SUBSTANCE. HOWEVER, IF CONDITIONS OF USE CREATE DISCOMFORT TO THE WORKER, A LOCAL EXHAUST SYSTEM SHOULD BE CONSIDERED.

PERSONAL RESPIRATORS (NIOSH APPROVED):

FOR CONDITIONS OF USE WHERE EXPOSURE TO DUST OR MIST IS APPARENT AND ENGINEERING CONTROLS ARE NOT FEASIBLE, A PARTICULATE RESPIRATOR (NIOSH TYPE N95 OR BETTER FILTERS) MAY BE WORN. IF OIL PARTICLES (E.G. LUBRICANTS, CUTTING FLUIDS, GLYCERINE, ETC.) ARE PRESENT, USE A NIOSH TYPE R OR P FILTER. FOR EMERGENCIES OR INSTANCES WHERE THE EXPOSURE LEVELS ARE NOT KNOWN, USE A FULL-FACE POSITIVE-PRESSURE, AIR-SUPPLIED RESPIRATOR.

WARNING: AIR-PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.

SKIN PROTECTION:

WEAR PROTECTIVE GLOVES AND CLEAN BODY-COVERING CLOTHING.

EYE PROTECTION:

USE CHEMICAL SAFETY GOGGLES. MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.

=====

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:
WHITE CRYSTALLINE POWDER.

BOILING POINT:
NOT APPLICABLE.

ODOR:
ODORLESS.

MELTING POINT:
60C (140F)

SOLUBILITY:
7.8G/100G WATER @ 18C (64F).

VAPOR DENSITY (AIR=1):
NO INFORMATION FOUND.

DENSITY:
2.2

VAPOR PRESSURE (MM HG):
NO INFORMATION FOUND.

PH:
8.3 (0.1 MOLAR @ 25C (77F))

EVAPORATION RATE (BUAC=1):
NO INFORMATION FOUND.

% VOLATILES BY VOLUME @ 21C (70F):
0

=====

10. STABILITY AND REACTIVITY

STABILITY:
STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE.

HAZARDOUS DECOMPOSITION PRODUCTS:
GASEOUS CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

INCOMPATIBILITIES:
REACTS WITH ACIDS TO FORM CARBON DIOXIDE. DANGEROUS REACTION WITH MONOAMMONIUM PHOSPHATE OR A SODIUM-POTASSIUM ALLOY.

CONDITIONS TO AVOID:
HEAT, MOISTURE, INCOMPATIBLES.

=====

Univar USA

11. TOXICOLOGICAL INFORMATION

INVESTIGATED AS A MUTAGEN, REPRODUCTIVE EFFECTOR. ORAL RAT LD50: 4220 MG/KG. IRRITATION DATA: HUMAN, SKIN, 30MG/3D-I MILD, RABBIT, EYE, 100 MG/30 S, MILD.

-----/CANCER LISTS/-----			
INGREDIENT	---NTP CARCINOGEN---		IARC CATEGORY
	KNOWN	ANTICIPATED	
SODIUM BICARBONATE (144-55-8)	NO	NO	NONE

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:
NO INFORMATION FOUND.

ENVIRONMENTAL TOXICITY:
NO INFORMATION FOUND.

13. DISPOSAL CONSIDERATIONS

WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE MANAGED IN AN APPROPRIATE AND APPROVED WASTE DISPOSAL FACILITY. PROCESSING, USE OR CONTAMINATION OF THIS PRODUCT MAY CHANGE THE WASTE MANAGEMENT OPTIONS. STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL DISPOSAL REGULATIONS.

DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.

14. TRANSPORT INFORMATION

NOT REGULATED.

15. REGULATORY INFORMATION

-----/CHEMICAL INVENTORY STATUS - PART 1/-----				
INGREDIENT	TSCA	EC	JAPAN	AUSTRALIA
SODIUM BICARBONATE (144-55-8)	YES	YES	YES	YES

-----/CHEMICAL INVENTORY STATUS - PART 2/-----				
INGREDIENT	KOREA	--CANADA--		PHIL.
		DSL	NDSL	
SODIUM BICARBONATE (144-55-8)	YES	YES	NO	YES

-----/FEDERAL, STATE & INTERNATIONAL REGULATIONS - PART 1/-----				
INGREDIENT	-SARA 302-		-SARA 313-	
	RQ	TPQ	LIST	CHEMICAL CATG
SODIUM BICARBONATE (144-55-8)	NO	NO	NO	NO

-----/FEDERAL, STATE & INTERNATIONAL REGULATIONS - PART 2/-----			
INGREDIENT	CERCLA	-RCRA-	-TSCA-
		261.33	8(D)
SODIUM BICARBONATE (144-55-8)			

Univar USA

SODIUM BICARBONATE (144-55-8)

NO

NO

NO

CHEMICAL WEAPONS CONVENTION: NO TSCA 12(B): NO
SARA 311/312: ACUTE: NO CHRONIC: NO FIRE: NO
REACTIVITY: NO (PURE / SOLID)

CDTA: NO
PRESSURE: NO

AUSTRALIAN HAZCHEM CODE: NONE ALLOCATED.
POISON SCHEDULE: NONE ALLOCATED.

WHMIS: THIS MSDS HAS BEEN PREPARED ACCORDING TO THE HAZARD CRITERIA OF
THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS
ALL OF THE INFORMATION REQUIRED BY THE CPR.

16. OTHER INFORMATION

NFPA RATINGS:

HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

FOR ADDITIONAL INFORMATION

CONTACT: MSDS COORDINATOR UNIVAR USA INC.
DURING BUSINESS HOURS, PACIFIC TIME (425) 889-3400
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PRODUCT SPECIFICATION SHEET AND/OR A CERTIFICATE OF ANALYSIS. THESE CAN BE
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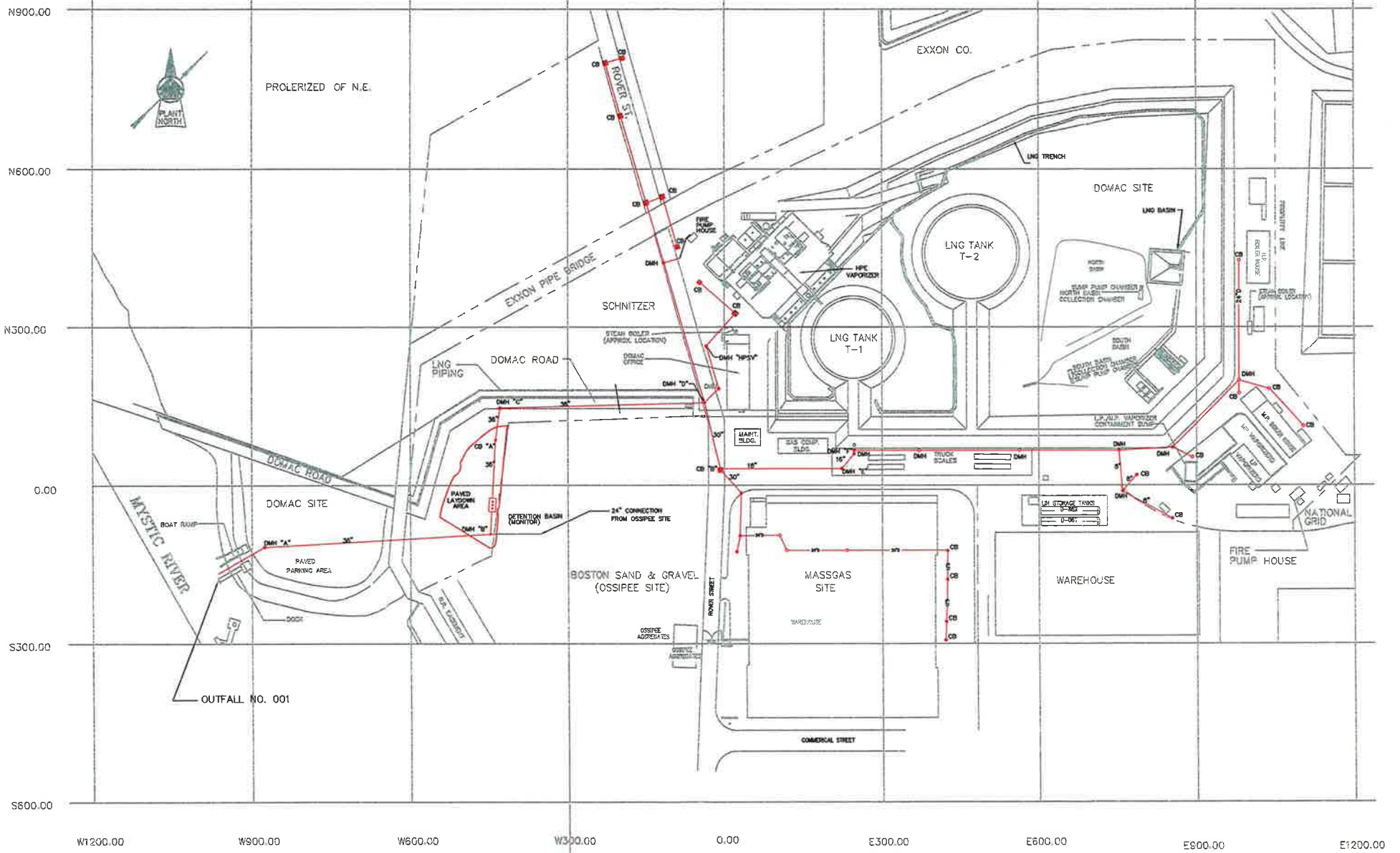
* * * E N D O F M S D S * * *

O & M Manual and Staffing Plan for Operation of Wastewater Treatment Facility -
Control of Water Bath pH for Ryan Vaporizers
Rev. 1, December 2013

APPENDIX B

LIST OF CERTIFIED WASTEWATER TREATMENT OPERATORS

Name	Title	License Grade	Registration No.	On File	Status	Expiration	Test Date
Robert Fauvel	Operator A	1-I-Full	15732	Yes	Active	12/31/2013	Dec 6 2011
Roger Harris	Lead Operator	1-I-Full	13661	Yes	Active	12/31/2015	May 19 2007
Sean Horrigan	Lead Operator	1-I-Full	13663	Yes	Active	12/31/2013	May 19 2007
John Hutchinson	Operator A	1-I-Full	13899	Yes	Active	12/31/2015	Nov 17 2007
Paul Kajunski	Operator A	1-I-Full	16477	Yes	Active	12/31/2013	May 17 2012
Peter Laubner	Operator A	1-I-Full	13895	Yes	Active	12/31/2015	Nov 17 2007
Chuck Robinson	Operator A	1-I-Full	15762	Yes	Active	12/31/2013	Oct 21 2010
David Sousa	Operator A	1-I-Full	15746	Yes	Active	12/31/2013	Oct-10
Kenneth Sparks	Lead Operator	1-I-Full	13892	Yes	Active	12/31/2015	Nov 17 2007
Joseph Stafford	Lead Operator	1-I-Full	13893	Yes	Active	12/31/2015	Nov 17 2007
Seth Williams	Operator A	1-I-Full	15731	Yes	Active	12/31/2015	Sept 23 2010
William Carroll	Shift Supervisor	1-I-Full	13658	Yes	Active	12/31/2015	May 19 2007
Bernard Lach	Shift Supervisor	1-I-Full	13664	Yes	Active	12/31/2015	May 19 2007
Joel Palladino	Shift Supervisor	1-I-Full	13667	Yes	Active	12/31/2015	May 19 2007
Brian Yetman	Shift Supervisor	1-I-Full	13669	Yes	Active	12/31/2015	May 19 2007
Cornelius Martin	Ops Manager	1-I-Full	13665	Yes	Active	12/31/2015	May 19 2007
At least one of the above are always on site working.							
Jerome Bowen	Lead Operator	No					
Troy Coleman	Operator C	No			before "A"		
Felipe Costa	Operator C	No			before "A"		
Paul Pace	Maint. Manager	1-I-Full		NO	Active	12/31/2009	May 19 2007
Luigi Defeo	Maint. Supervisor	1-I-Full		NO	In-Active	12/31/2009	May 19 2007
Ray DiNitto	Maint. Tech	1-I-Full	13660	Yes	In-Active?	12/31/2015	May 19 2007
Jeffrey Reese	Maint. Tech	1-I-Full		No	Active	12/31/2009	May 19 2007
12/4/2013							



10138\2C-4
5/19/2014

**OUTFALL NO. 001
STORM DRAIN SYSTEM PLAN**

ATTACHMENT 2C-4

Attachment 2C-5

**Quarterly Sampling Data
Detention Basin
1st Quarter 2010 – 1st Quarter 2014**

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN	1st Q 2010		2nd Q 2010		3rd Q 2010		4th Q 2010		1st Q 2011		2nd Q 2011		3rd Q 2011		4th Q 2011	
SAMPLING DATE	25-Feb-10	11-Mar-10	19-May-10	7-Apr-10	18-Sep-10	31-Aug-10	12-Dec-10	1-Dec-10	7-Mar-11	25-Jan-11	18-May-11	10-Jun-11	16-Aug-11	13-Sep-11	27-Oct-11	29-Nov-11
LAB SAMPLE ID	L1002799	L1003700	L1007486	L1005071	L1014519	L1013565	L1019610	L1019193	L11029519	L1101048	L1106938	L1108179	L1112524	L1114339	L1117738	L1119816
	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT
Total Suspended Solids (mg/L)	36.6	NA	7.1	NA	-	NA	14	NA	18	NA	<5.0	NA	-	NA	60	NA
pH Range (SU)	7.5	NA	7.2	NA	7.2	NA	7.2	NA	7.2	NA	7.2	NA	7.2	NA	7.4	NA
Volatile Organic Compounds (VOCs)																
(EPA Method 624) (ug/L)																
Methylene chloride	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chloroform	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Carbon tetrachloride	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dibromochloromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Chloroethylvinyl ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Tetrachloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bromoform	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzene	NA	NA	NA	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	NA	4.1	NA
Toluene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	<1	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	2.1	NA	NA	NA	NA	NA	NA	NA	1.6	NA
Chloromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bromomethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Vinyl chloride	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Trichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
p/m-xylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
o-xylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Xylene (Total)	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Styrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acetone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Butanone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Vinyl acetate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acrolein	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acrylonitrile	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN	1st Q 2010		2nd Q 2010		3rd Q 2010		4th Q 2010		1st Q 2011		2nd Q 2011		3rd Q 2011		4th Q 2011	
SAMPLING DATE	25-Feb-10	11-Mar-10	19-May-10	7-Apr-10	18-Sep-10	31-Aug-10	12-Dec-10	1-Dec-10	7-Mar-11	25-Jan-11	18-May-11	10-Jun-11	16-Aug-11	13-Sep-11	27-Oct-11	29-Nov-11
LAB SAMPLE ID	L1002799	L1003700	L1007486	L1005071	L1014519	L1013565	L1019810	L1019193	L11029519	L1101048	L1106938	L1108179	L1112524	L1114339	L1117738	L1119816
	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT
Semi-Volatile Organic Compounds (SVOCs)																
(EPA Method 625) (ug/l)																
Acenaphthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benidine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-chloroethyl)ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Azobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	0.5	NA	NA	NA	NA	NA	NA	NA	0.86	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-chloroisopropyl)ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Isophorone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Naphthalene	NA	NA	NA	NA	NA	NA	0.38	NA	NA	NA	NA	NA	NA	NA	9	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
NDPA/DPA	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
n-Nitrosodi-n-propylamine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-ethylhexyl)phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Di-n-butylphthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Di-n-octylphthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	0.49	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chrysene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	0.51	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Anthracene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(ghi)perylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	0.66	NA
Fluorene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	0.79	NA	NA	NA	NA	NA	NA	NA	1.1	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Pyrene	NA	NA	NA	NA	NA	NA	0.53	NA	NA	NA	NA	NA	NA	NA	1.5	NA
n-Nitrosodimethylamine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
p-Chloro-m-cresol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,6-Dinitro-o-cresol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Phenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN	1st Q 2010		2nd Q 2010		3rd Q 2010		4th Q 2010		1st Q 2011		2nd Q 2011		3rd Q 2011		4th Q 2011	
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LAB SAMPLE ID	L1002799	L1003700	L1007486	L1005071	L1014519	L1013565	L1019810	L1019193	L11029519	L1101048	L1106938	L1108179	L1112524	L1114339	L1117738	L1119816
	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT
Polychlorinated Biphenyls (PCBs)/Pesticides (EPA Method 608) (ug/l)	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Delta-BHC	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Lindane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Alpha-BHC	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Beta-BHC	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Heptachlor	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aldrin	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endrin	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endrin aldehyde	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dieldrin	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,4'-DDD	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endosulfan I	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endosulfan II	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Toxaphene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chlordane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
cis-Chlordane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
trans-Chlordane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1221	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1232	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1242/1016	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1248	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1254	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1260	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Total Phenolics (ug/L)	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	-
Total Metals (ug/L)	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Antimony, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	6.3	NA	NA	NA	NA	NA	NA	NA	2.2	NA
Beryllium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Copper, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	3.2	NA
Lead, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Nickel, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Silver, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Thallium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	23.9	NA	NA	NA	NA	NA	NA	NA	113.4	NA
Dissolved Metals (ug/L)	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Antimony, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Beryllium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	0.9	NA	NA	NA	NA	NA	NA	NA	-	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Thallium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Total Residual Chlorine (mg/L)	<0.02	NA	<0.02	NA	<0.02	NA	<0.02	NA	<0.02	NA	<0.02	NA	<0.02	NA	<0.02	NA
Total Cyanide (ug/L)	180	610	606	498	627	50	<5	629	345	710	504	435	457	350	50	915

Notes:
- : Not detected.
ug/L = micrograms per liter
mg/L = milligrams per liter

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN	1st Q 2012		2nd Q 2012		3rd Q 2012		4th Q 2012		1st Q 2013		2nd Q 2013		3rd Q 2013		4th Q 2013	
SAMPLING DATE	1-Mar-12	15-Jan-12	22-May-12	8-Jun-12	19-Sep-12	12-Sep-12	8-Nov-12	6-Dec-12	19-Mar-13	5-Mar-13	24-May-13	17-Jun-13	22-Sep-13	15-Aug-13	27-Nov-13	26-Nov-13
LAB SAMPLE ID	L1203529	L1204479	L1209073	L1210200	L1216674	L1210200	L1220254	L121876	L1304540	L1303662	L1309443	L1311017	L1316722	L1315858	L1324247	L1324141
	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT
Total Suspended Solids (mg/L)	26	NA	12	NA	6.7	NA	38	NA	21	NA	9	NA	9.2	NA	140	NA
pH Range (SU)	7.0	NA	7.0	NA	7.2	NA	7.2	NA	7.4	NA	7.1	NA	7.4	NA	6.2	NA
Volatile Organic Compounds (VOCs)																
(EPA Method 624) (ug/L)																
Methylene chloride	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chloroform	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Carbon tetrachloride	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dibromochloromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Chloroethylvinyl ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Tetrachloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bromoform	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzene	NA	NA	NA	NA	NA	NA	6.2	NA	NA	NA	NA	NA	NA	NA	0.57	NA
Toluene	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-	-	-	-	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	3.0	NA	NA	NA	NA	NA	NA	NA	-	NA
Chloromethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bromomethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Vinyl chloride	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Trichloroethene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
p/m-xylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
o-xylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Xylene (Total)	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	1.0	NA
Styrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acetone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Butanone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Vinyl acetate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acrolein	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acrylonitrile	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN	1st Q 2012		2nd Q 2012		3rd Q 2012		4th Q 2012		1st Q 2013		2nd Q 2013		3rd Q 2013		4th Q 2013	
SAMPLING DATE	1-Mar-12	15-Jan-12	22-May-12	8-Jun-12	19-Sep-12	12-Sep-12	8-Nov-12	4-Dec-12	19-Mar-13	5-Mar-13	24-May-13	17-Jun-13	22-Sep-13	15-Aug-13	27-Nov-13	26-Nov-13
LAB SAMPLE ID	L1203529	L1204479	L1209073	L1210200	L1216674	L1210200	L1220254	L1221876	L1304560	L1303662	L1309443	L1311017	L1318722	L1315858	L1324247	L1324141
	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT
<i>Semi-Volatile Organic Compounds (SVOCs)</i>																
(EPA Method 825) (ug/l)																
Acenaphthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzidine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-chloroethyl)ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Azobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-chloroisopropyl)ether	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Isophorone	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Naphthalene	NA	NA	NA	NA	NA	NA	9.2	NA	NA	NA	NA	NA	NA	NA	-	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
NDPA/DPA	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
n-Nitrosodi-n-propylamine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Bis(2-ethylhexyl)phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Di-n-butylphthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Di-n-octylphthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chrysene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Anthracene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Benzo(ghi)perylene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Fluorene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Pyrene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
n-Nitrosodimethylamine	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
p-Chloro-m-cresol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,6-Dinitro-o-cresol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Phenol	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN	1st Q 2012		2nd Q 2012		3rd Q 2012		4th Q 2012		1st Q 2013		2nd Q 2013		3rd Q 2013		4th Q 2013	
SAMPLING DATE	1-Mar-12	15-Jan-12	22-May-12	6-Jun-12	19-Sep-12	12-Sep-12	6-Nov-12	4-Dec-12	19-Mar-13	5-Mar-13	24-May-13	17-Jun-13	22-Sep-13	15-Aug-13	27-Nov-13	26-Nov-13
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	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT	WET EVENT	DRY EVENT
Polychlorinated Biphenyls (PCBs)/Pesticides (EPA Method 608) (ug/l)																
Delta-BHC	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Lindane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Alpha-BHC	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Beta-BHC	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Heptachlor	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aldrin	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endrin	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endrin aldehyde	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Dieldrin	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,4'-DDD	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endosulfan I	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endosulfan II	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Toxaphene	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chlordane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
cis-Chlordane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
trans-Chlordane	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1221	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1232	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1242/1016	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1248	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1254	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Aroclor 1260	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Total Phenolics (ug/L)	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Total Metals (ug/L)																
Antimony, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	5.8	NA	NA	NA	NA	NA	NA	NA	3.91	NA
Beryllium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Copper, Total	NA	NA	NA	NA	NA	NA	16.5	NA	NA	NA	NA	NA	NA	NA	120.9	NA
Lead, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Nickel, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Silver, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Thallium, Total	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	-	NA	702	NA	702	NA	703	NA	1503	NA
Dissolved Metals (ug/L)																
Antimony, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Beryllium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Thallium, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-	NA
Total Residual Chlorine (mg/L)	<0.02	NA	<0.02	NA	<0.02	NA	0.04	NA	<0.02	NA	<0.02	NA	<0.02	NA	ND	NA
Total Cyanide (ug/L)	292	935	413	778	382	969	40	1,010	406	801	12	29	7	24	ND	364

Notes:
- : Not detected.
ug/L = micrograms per liter
mg/L = milligrams per liter

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN SAMPLING DATE LAB SAMPLE ID	1st Q 2014	
	13-Mar-14 L1405229	25-Feb-14 L1404067
	WET EVENT	DRY EVENT
Total Suspended Solids (mg/L)	12	NA
pH Range (SLI)	7.2	NA
<i>Volatle Organic Compounds (VOCs)</i> (EPA Method 624) (ug/L)		
Methylene chloride	NA	NA
1,1-Dichloroethane	NA	NA
Chloroform	NA	NA
Carbon tetrachloride	NA	NA
1,2-Dichloropropane	NA	NA
Dibromochloromethane	NA	NA
1,1,2-Trichloroethane	NA	NA
2-Chloroethylvinyl ether	NA	NA
Tetrachloroethene	NA	NA
Chlorobenzene	NA	NA
Trichlorofluoromethane	NA	NA
1,2-Dichloroethane	NA	NA
1,1,1-Trichloroethane	NA	NA
Bromodichloromethane	NA	NA
trans-1,3-Dichloropropene	NA	NA
cis-1,3-Dichloropropene	NA	NA
Bromoform	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA
Benzene	NA	NA
Toluene	NA	NA
Ethylbenzene	NA	NA
Chloromethane	NA	NA
Bromomethane	NA	NA
Vinyl chloride	NA	NA
Chloroethane	NA	NA
1,1-Dichloroethene	NA	NA
trans-1,2-Dichloroethene	NA	NA
cis-1,2-Dichloroethene	NA	NA
Trichloroethene	NA	NA
1,2-Dichlorobenzene	NA	NA
1,3-Dichlorobenzene	NA	NA
1,4-Dichlorobenzene	NA	NA
p/m-xylene	NA	NA
o-xylene	NA	NA
Xylene (Total)	NA	NA
Styrene	NA	NA
Acetone	NA	NA
Carbon disulfide	NA	NA
2-Butanone	NA	NA
Vinyl acetate	NA	NA
4-Methyl-2-pentanone	NA	NA
2-Hexanone	NA	NA
Acrolein	NA	NA
Acrylonitrile	NA	NA

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN SAMPLING DATE LAB SAMPLE ID	1st Q 2014	
	13-Mar-14 L1405229	25-Feb-14 L1404067
	WET EVENT	DRY EVENT
<i>Semi-Volatile Organic Compounds (SVOCs)</i> (EPA Method 625) (ug/l)		
Acenaphthene	NA	NA
Benzidine	NA	NA
1,2,4-Trichlorobenzene	NA	NA
Hexachlorobenzene	NA	NA
Bis(2-chloroethyl) ether	NA	NA
2-Chloronaphthalene	NA	NA
1,2-Dichlorobenzene	NA	NA
1,3-Dichlorobenzene	NA	NA
1,4-Dichlorobenzene	NA	NA
3,3'-Dichlorobenzidine	NA	NA
2,4-Dinitrotoluene	NA	NA
2,6-Dinitrotoluene	NA	NA
Azobenzene	NA	NA
Fluoranthene	NA	NA
4-Chlorophenyl phenyl ether	NA	NA
4-Bromophenyl phenyl ether	NA	NA
Bis(2-chloroisopropyl) ether	NA	NA
Bis(2-chloroethoxy) methane	NA	NA
Hexachlorobutadiene	NA	NA
Hexachlorocyclopentadiene	NA	NA
Hexachloroethane	NA	NA
Isophorone	NA	NA
Naphthalene	NA	NA
Nitrobenzene	NA	NA
NDPA/DPA	NA	NA
n-Nitrosodl-n-propylamine	NA	NA
Bis(2-ethylhexyl) phthalate	NA	NA
Butyl benzyl phthalate	NA	NA
Di-n-butyl phthalate	NA	NA
Di-n-octyl phthalate	NA	NA
Diethyl phthalate	NA	NA
Dimethyl phthalate	NA	NA
Benzo(a)anthracene	NA	NA
Benzo(a)pyrene	NA	NA
Benzo(b)fluoranthene	NA	NA
Benzo(k)fluoranthene	NA	NA
Chrysene	NA	NA
Acenaphthylene	NA	NA
Anthracene	NA	NA
Benzo(ghi)perylene	NA	NA
Fluorene	NA	NA
Phenanthrene	NA	NA
Dibenzo(a,h)anthracene	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA
Pyrene	NA	NA
n-Nitrosodimethylamine	NA	NA
2,4,6-Trichlorophenol	NA	NA
p-Chloro-m-cresol	NA	NA
1-Methylnaphthalene	NA	NA
2-Chlorophenol	NA	NA
2,4-Dichlorophenol	NA	NA
2,4-Dimethylphenol	NA	NA
2-Nitrophenol	NA	NA
4-Nitrophenol	NA	NA
2,4-Dinitrophenol	NA	NA
4,6-Dinitro-o-cresol	NA	NA
Pentachlorophenol	NA	NA
Phenol	NA	NA

Attachment 2C-5
Summary of Laboratory Results
Detention Basin - Historical Data (2010 - 2014)
Distrigas of Massachusetts LLC

LOCATION: DETENTION BASIN SAMPLING DATE LAB SAMPLE ID	1st Q 2014	
	13-Mar-14 L1405229 WET EVENT	25-Feb-14 L1404067 DRY EVENT
Polychlorinated Biphenyls (PCBs)/Pesticides (EPA Method 608) (ug/l)		
Delta-BHC	NA	NA
Lindane	NA	NA
Alpha-BHC	NA	NA
Beta-BHC	NA	NA
Heptachlor	NA	NA
Aldrin	NA	NA
Heptachlor epoxide	NA	NA
Endrin	NA	NA
Endrin aldehyde	NA	NA
Dieldrin	NA	NA
4,4'-DDE	NA	NA
4,4'-DDD	NA	NA
4,4'-DDT	NA	NA
Endosulfan I	NA	NA
Endosulfan II	NA	NA
Endosulfan sulfate	NA	NA
Toxaphene	NA	NA
Chlordane	NA	NA
cis-Chlordane	NA	NA
trans-Chlordane	NA	NA
Aroclor 1221	NA	NA
Aroclor 1232	NA	NA
Aroclor 1242/1016	NA	NA
Aroclor 1248	NA	NA
Aroclor 1254	NA	NA
Aroclor 1260	NA	NA
Total Phenolics (ug/L)	NA	NA
Total Metals (ug/L)		
Antimony, Total	NA	NA
Arsenic, Total	NA	NA
Beryllium, Total	NA	NA
Cadmium, Total	NA	NA
Chromium, Total	NA	NA
Copper, Total	NA	NA
Lead, Total	NA	NA
Mercury, Total	NA	NA
Nickel, Total	NA	NA
Selenium, Total	NA	NA
Silver, Total	NA	NA
Thallium, Total	NA	NA
Zinc, Total	702	NA
Dissolved Metals (ug/L)	NA	NA
Antimony, Dissolved	NA	NA
Arsenic, Dissolved	NA	NA
Beryllium, Dissolved	NA	NA
Cadmium, Dissolved	NA	NA
Chromium, Dissolved	NA	NA
Copper, Dissolved	NA	NA
Lead, Dissolved	NA	NA
Mercury, Dissolved	NA	NA
Nickel, Dissolved	NA	NA
Selenium, Dissolved	NA	NA
Silver, Dissolved	NA	NA
Thallium, Dissolved	NA	NA
Zinc, Dissolved	NA	NA
Total Residual Chlorine (mg/L)	<0.02	NA
Total Cyanide (ug/L)	174	389

Notes:
- : Not detected.
ug/L = micrograms per liter
mg/L = milligrams per liter

Attachment 2C-6

**NPDES Form 2C Dry Weather Sampling
Analytical Report
Alpha Analytical
Report Date: 05/07/14**



ANALYTICAL REPORT

Lab Number:	L1409076
Client:	ERM, Inc. 1 Beacon Street 5th Floor Boston, MA 02108
ATTN:	Lyndsey Colburn
Phone:	(617) 646-7829
Project Name:	DISTRIGAS
Project Number:	0107297.04
Report Date:	05/07/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial_No:05071410:06

Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1409076
Report Date: 05/07/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409076-01	SD-6	EVERETT, MA	04/30/14 07:25

Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1409076
Report Date: 05/07/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

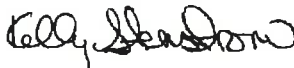
HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 05/07/14

INORGANICS & MISCELLANEOUS

Serial_No:05071410:06

Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

SAMPLE RESULTS

Lab ID: L1409076-01

Date Collected: 04/30/14 07:25

Client ID: SD-6

Date Received: 04/30/14

Sample Location: EVERETT, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	8.2		mg/l	5.0	NA	1	-	05/01/14 16:25	30,2540D	DW
pH (H)	7.4		SU	-	NA	1	-	04/30/14 21:36	30,4500H+-B	JA
Nitrogen, Ammonia	0.618		mg/l	0.075	--	1	05/01/14 14:32	05/01/14 22:03	30,4500NH3-BH	AT
Chemical Oxygen Demand	79.		mg/l	20	--	1	05/02/14 16:00	05/02/14 19:04	44,410.4	TL
BOD, 5 day	3.6		mg/l	2.0	NA	1	04/30/14 22:10	05/05/14 15:30	30,5210B	SE
Total Organic Carbon	7.8		mg/l	2.5	--	5	-	05/01/14 06:30	1,9060	DW



Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG686325-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	04/30/14 22:10	05/05/14 15:30	30,5210B	SE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG686427-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	05/01/14 16:25	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG686645-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	05/01/14 14:32	05/01/14 21:52	30,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG686680-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	05/01/14 06:30	1,9060	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG686931-1										
Chemical Oxygen Demand	ND		mg/l	20	--	1	05/02/14 16:00	05/02/14 19:03	44,410.4	TL

Lab Control Sample Analysis **Batch Quality Control**

Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG686325-2								
BOD, 5 day	104		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG686353-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG686645-2								
Nitrogen, Ammonia	93		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG686680-2								
Total Organic Carbon	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG686931-2								
Chemical Oxygen Demand	99		-		95-105	-		

Matrix Spike Analysis Batch Quality Control

Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686325-4 QC Sample: L1409053-02 Client ID: MS Sample												
BOD, 5 day	ND	100	140	138	-	-	-	-	50-145	-	-	35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686645-4 QC Sample: L1409076-01 Client ID: SD-6												
Nitrogen, Ammonia	0.618	4	4.62	100	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686680-4 QC Sample: L1409076-01 Client ID: SD-6												
Total Organic Carbon	7.8	20	29	106	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686931-3 QC Sample: L1409105-01 Client ID: MS Sample												
Chemical Oxygen Demand	ND	238	260	108	-	-	-	-	80-120	-	-	20

Project Name: DISTRIGAS

Project Number: 0107297.04

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1409076

Report Date: 05/07/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686325-3 QC Sample: L1409053-01 Client ID: DUP Sample						
BOD, 5 day	81	120	mg/l	39	Q	35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686353-2 QC Sample: L1409063-01 Client ID: DUP Sample						
pH	8.0	7.9	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686427-2 QC Sample: L1409053-01 Client ID: DUP Sample						
Solids, Total Suspended	91	89	mg/l	2		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686645-3 QC Sample: L1409076-01 Client ID: SD-6						
Nitrogen, Ammonia	0.618	0.639	mg/l	3		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686680-3 QC Sample: L1409076-01 Client ID: SD-6						
Total Organic Carbon	7.8	7.7	mg/l	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686931-4 QC Sample: L1409105-01 Client ID: DUP Sample						
Chemical Oxygen Demand	ND	ND	mg/l	NC		20

Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal**Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409076-01A	Plastic 1000ml unpreserved	A	8	4.4	Y	Absent	TSS-2540(7)
L1409076-01B	Plastic 1000ml unpreserved	A	8	4.4	Y	Absent	BOD-5210(2),PH-4500(.01)
L1409076-01C	Plastic 500ml H2SO4 preserved	A	<2	4.4	Y	Absent	COD-410(28),NH3-4500(28)
L1409076-01D	Vial H2SO4 preserved	A	N/A	4.4	Y	Absent	TOC-9060(28)
L1409076-01E	Vial H2SO4 preserved	A	N/A	4.4	Y	Absent	TOC-9060(28)

*Values in parentheses indicate holding time in days



Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1409076
Report Date: 05/07/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.
---	--

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report



Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

Data Qualifiers

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: DISTRIGAS

Lab Number: L1409076

Project Number: 0107297.04

Report Date: 05/07/14

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA 2540D: TSS

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Ti; **EPA 200.7:** Ba, Be, Ca, Cd, Cr, Cu, Na; **EPA 245.1:** Mercury; **EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Ti, Zn;

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn;

EPA 245.1, SM4500H-B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH₃-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO₃-F, EPA 353.2:** Nitrate-N, **SM4500NH₃-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Please print or type in the unshaded areas only.

FORM
2F
NPDESU.S. Environmental Protection Agency
Washington, DC 20460**Application for Permit to Discharge Storm Water
Discharges Associated with Industrial Activity****Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (list)	B. Latitude			C. Longitude			D. Receiving Water (name)
001	42.00	23.00	19.00	-71.00	3.00	38.00	Mystic River

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
NPDES Permit MA0020010, Section B.5	001	Groundwater infiltration to the storm drain system	To address the cyanide loading in the storm drain system from prior manufactured gas plant operations at the site:		
			Submit Methodology for Storm Drain Evaluation (Special Study)	2/28/10	2/4/10
			Complete evaluation, describe BMPs to limit and/or prevent cyanide concentrations within the discharge, and submit Storm Drain Evaluation Report (Special Study)	12/1/10	11/19/10
			Complete implementation of BMPs	12/1/12	6/18/11
Section III: see the attached Additional Information and Attachments 2F-1, 2F-2, 2F-3 and 2F-4. The USGS Location Map is attached to Form 1.			Evaluate the effectiveness of BMPs and Submit Storm Drain (Special Study)		
			Evaluation of Best Management Practices	12/1/13	11/21/13
			As required, reports previous submitted are attached.		

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
001	421,067 sq ft See the attached Additional Information and Attachment 2F-4.	829,368 sq ft			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

No exposure to storm water.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
001	Neutralization of submerged combustion vaporizer water-bath/condensate for the LP and HPE vaporizers. Refer to the Additional Information for Form 2C, Section II.B.	2-K

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
Anothony Scaraggi, VP of Operations		5/25/14

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Quarterly sampling during both a rain event and dry weather is conducted at the detention basin (SD-6) in accordance with NPDES Permit MA0020010. The sample method is grab sampling conducted within one hour of low tide. Refer to Form C, Section V, Part A, and Form 2F, Section VI1, Part A for additional sampling conducted for this Application.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No significant leaks or spills.

Continued from Page 2

EPA ID Number (copy from Item 1 of Form 1)
MA0020010**VII. Discharge Information**

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (list all such pollutants below)☒ No (go to Section IX)

N/A

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such pollutants below)☒ No (go to Section IX)

N/A

IX. Contract Analysis Information


Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)☐ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Alpha Analytical	Eight Walkup Drive, Westborough, MA 01581	508-898-9220	BOD COD TOC TSS Ammonia (as N) Total Nitrogen Total Phosphorus Oil and Grease pH Total Cyanide Total Residual Chlorine Bacteria (Enterococcus) EPA Priority Pollutants

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (Type Or Print) Anothony Scaraggi, Vice President of Operations	B. Area Code and Phone No. (617) 381-8571
C. Signature 	D. Date Signed 5/23/14

VII. Discharge information (Continued from page 3 of Form 2F)

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	N.D.	N/A			1.00	See the attached Additional
Biological Oxygen Demand (BOD5)	7.6 mg/l				1.00	Information,
Chemical Oxygen Demand (COD)	53 mg/l				1.00	
Total Suspended Solids (TSS)	140 mg/l		42.6 mg/l		4.00	
Total Nitrogen	2.9 mg/l				1.00	
Total Phosphorus	0.128 mg/l				1.00	
pH	Minimum 6.20	Maximum 7.40	Minimum	Maximum	4.00	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

[illegible]

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
N/A. See the attached Additional Informa- tion.					

7. Provide a description of the method of flow measurement or estimate.

For quarterly sampling required by NPDES Permit MA0020010, the velocity at the detention basin (SD-6) is metered in ft/sec. The height of the water in detention basin/discharge pipe is measured. The flow rate is calculated based on the velocity, diameter of the discharge pipe (36"), and height of water in the pipe. The total flow from the rain event is calculated based on the total rainfall, drainage area, and runoff coefficient.

NPDES Form 2F
Additional Information

Form 2F, Section III

The topographic USGE Site Location map is presented as an attachment to Form 1. Drawings of drainage area are presented in Attachments 2F-1 and 2F-2.

The site description and characterization of the storm water drainage is presented below

I. General Site Description

The Distrigas Everett Marine Terminal is located in the City of Everett immediately north and east of the Everett-Boston boundary. The site comprises a 37.4 acre area of industrial-zoned land. Of the 37.4 acres, 26.55-acres are dry land with the balance being in the Mystic River (See Attachment 2F-3, Storm Water Total Site Area). The industrial area is bounded on the west by Robin Street, on the north by Beacham Street, on the east by Commercial Street and on the South by the Mystic River. The site is at an elevation of approximately 16 feet National Geodetic Vertical Datum (NGVD).

The site contains two insulated LNG storage tanks, LNG ship unloading facilities on the Mystic River, LNG vaporization facilities, LNG truck loading facilities, two horizontal liquid nitrogen (LIN) storage tanks, as well as office, controls and maintenance buildings. The LNG tanks are contained within a large dike. The land use and character of this industrial district have not changed for over 100 years. Diverse heavy industries have long dominated this section of Everett.

II. Hydrology

The Mystic River

The Mystic River originates at the Mystic lakes in Medford and Arlington, Massachusetts and flows 7.4 miles to its confluence with Chelsea River at Boston's inner harbor. Residential, commercial, and industrial uses characterize the watershed. The Amelia Earhart Dam, located at river mile 2.0 just below the confluence of the Malden River, and approximately 0.75 miles upstream of Outfall No. 001, separates the lower, tidal (salt water) reach of the Mystic from the upper fresh water portion. Massachusetts Surface Water Quality Standards (314 CMR 4.03) classify the upper Mystic as a Class B Warm Water Fishery and the lower as a Class SB Marine Fishery.

III. Storm Water Runoff

Site Drainage System

Rainfall runoff from buildings and yard areas flows by gravity to the Mystic River via an existing drainage system as shown in Attachments 2F-1 and 2F-2 (Outfall No. 001). Areas, where there is a potential for LNG spillage, are bermed and contained. Accumulated rainfall within dike areas is monitored for LNG presence prior to discharge. Catch basins are routinely inspected to ensure proper function.

Storm Water Flow

Estimated average storm water runoff flows were calculated using the rational method (see Attachment 2F-4 for Storm Water Calculations, and Storm Water Drainage Areas). Based on a developed site area of 19.04 acres (which does not include naturally drained areas), a runoff coefficient of 0.55, and an average daily precipitation of 0.12 inches, storm runoff from the site averages 34,120 gallons per day (gpd). Runoff from the 25, 50 and 100 year, 24-hour storms (rainfall = 6 inches/day) is estimated at 1,706,010 gpd.

IV Discharge Impacts on Water Quality

LNG storage and handling areas at the Site are entirely enclosed; therefore storm water interaction with any of these materials will be very limited. Except for exceedances of the TSS and pH in the 4th quarter of 2013 due to a heavy rainfall event, the discharge has been in compliance with effluent limits. Regarding the discharge of contaminants from groundwater infiltration associated with prior manufactured gas plant operations, refer to the Additional Information for Form 2C, Sections IV and V.

Form 2F, Section IV, Part A

Refer to Attachment 2F-4 (Storm Water Calculation, and Storm Water Drainage Areas) for impervious surface areas and the total area drained to the storm drain system.

Form 2F, Section VII, Part A

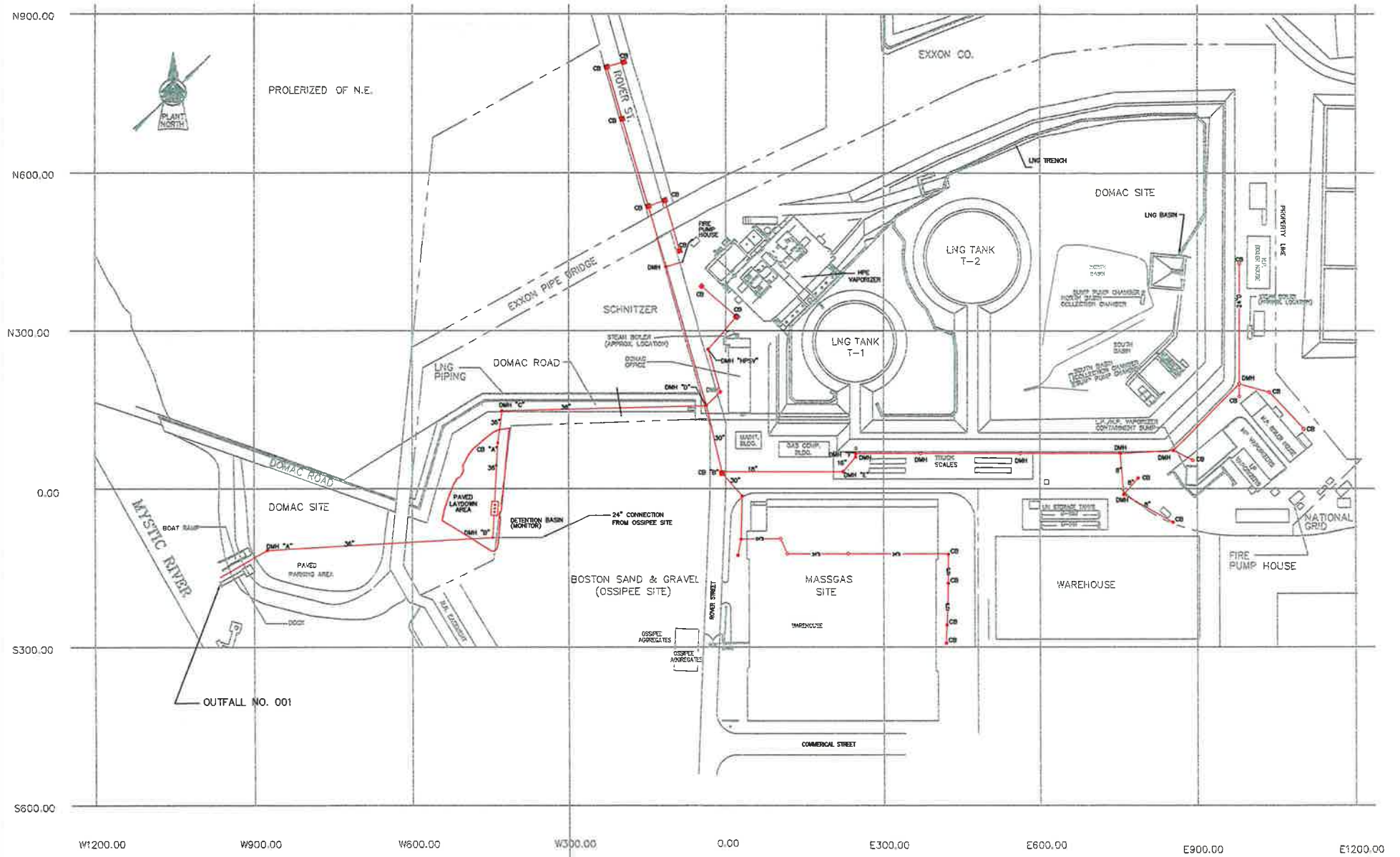
Test results for oil and grease, BOD5, COD, total nitrogen and total phosphorus are from sampling conducted during a rain event on April 23, 2014. The laboratory report from Alpha Laboratory is contained in Attachment 2F-5.

TSS and pH data are based on quarterly sampling conducted during rain events in the 2nd, 3rd and 4th quarters of 2013 and the 1st quarter of 2014 (i.e., within the last year, per the instructions for completing this section).

Due to the tidal nature of the Mystic River in this reach, the outfall at the Detention Basin (SD-6) is inundated during the tide cycle and samples must be collected at slack low tide to prevent sampling of tide water from the Mystic River. Slack low tide is the period of time during which tidal influence water from the Mystic River are relatively still (during the turn of the low tide), about one hour prior to and about one hour after low tide. Due to this limited, 2-hour window for, representative composite sampling cannot be conducted.

Form 2F, Section VII, Part D

Composite flow sampling has not been conducted for the reasons described above for Form 2F, Section VII, Part A.



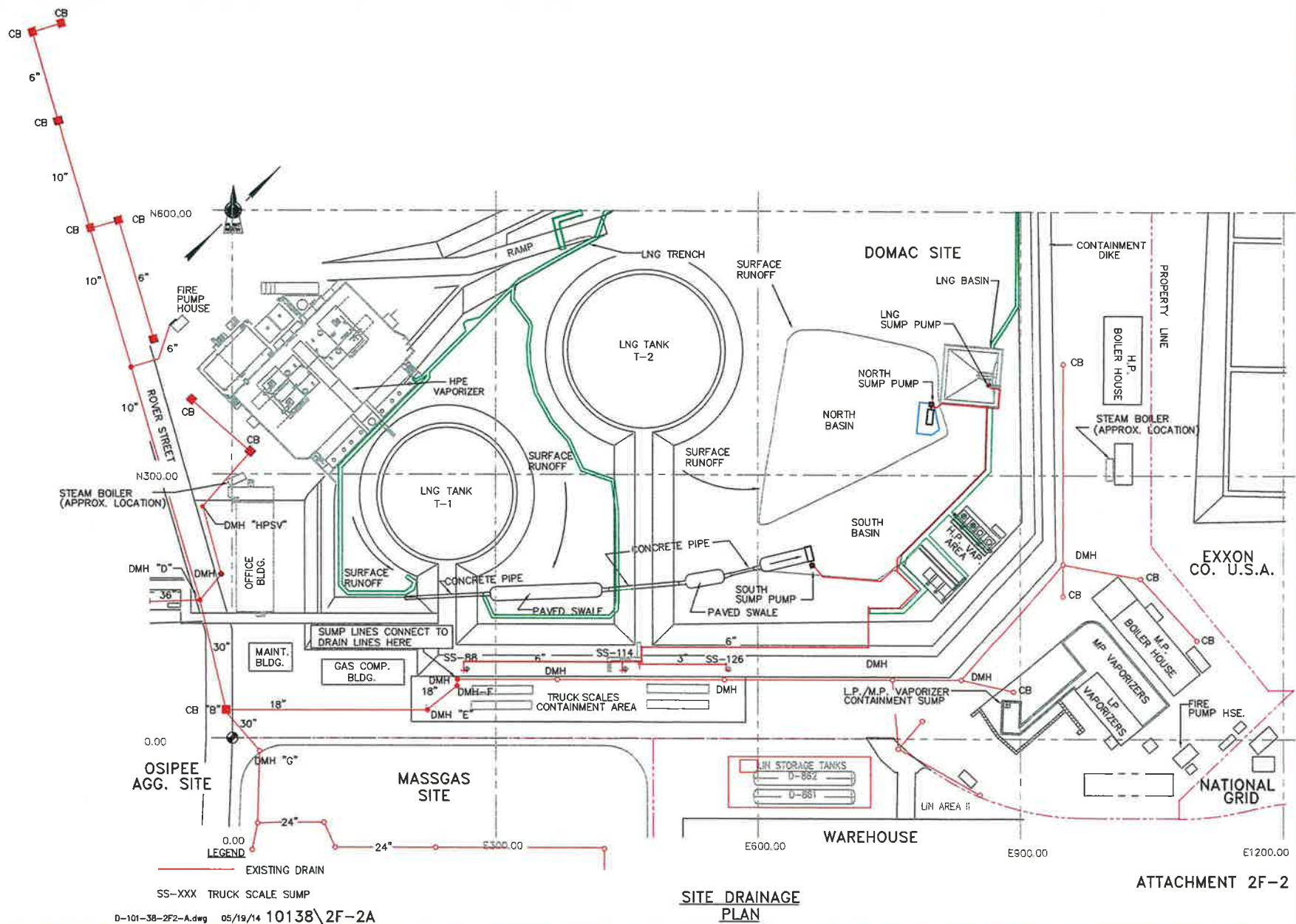
10138\2F-1
5/19/2014

OUTFALL NO. 001
DRAINAGE AREA

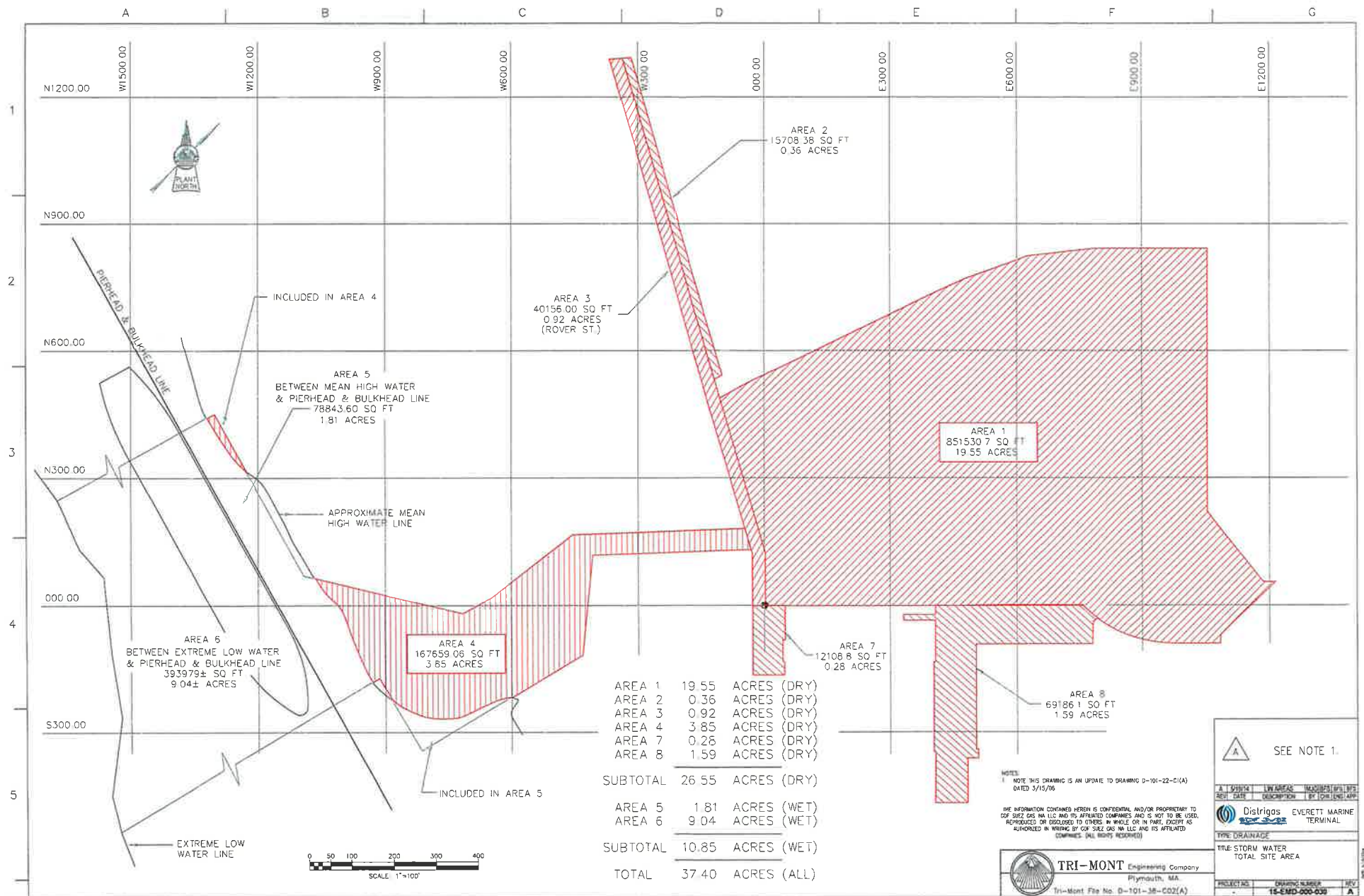
LEGEND

— EXISTING DRAIN

ATTACHMENT 2F-1



Form 2F
Attachment 2F-3
Storm Water Total Site Area
Drawing 16-EMD-000-030



SEE NOTE 1.																			
<table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3/15/06</td> <td>IN AREA 1</td> <td>W3000</td> <td>W3000</td> <td>3/15/06</td> </tr> </tbody> </table>	REV.	DATE	DESCRIPTION	BY	CHKD	DATE	1	3/15/06	IN AREA 1	W3000	W3000	3/15/06	<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3/15/06</td> <td>W3000</td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	1	3/15/06	W3000
REV.	DATE	DESCRIPTION	BY	CHKD	DATE														
1	3/15/06	IN AREA 1	W3000	W3000	3/15/06														
NO.	DATE	DESCRIPTION																	
1	3/15/06	W3000																	
Distigas EVERETT MARINE TERMINAL																			
TYPE DRAINAGE																			
TITLE STORM WATER TOTAL SITE AREA																			
PROJECT NO.	DRAWING NUMBER																		
-	15-EMD-000-030																		
REV	A																		



Form 2F
Attachment 2F-4
Storm Water Calculations &
Storm Water Drainage Areas, Drawing 00-EMD-000-245

STORM WATER CALCULATIONS

Total Site Area

26.55 ± Acres

See Drawing No. 16-EMD-000-030 for representation of Storm Water Total Site Area
See Drawing No. 00-EMD-000-245 for representation of Storm Water Drainage Areas

Area drained to Containment Sumps

LNG Tanks Containment Area	Total Area	Pervious	Impervious
North Sump	171,163 sq. ft.	153,393 sq. ft.	17,769 sq. ft.
South Sump	123,190 sq. ft.	97,349 sq. ft.	25,841 sq. ft.
LNG Sump	158,727 sq. ft.	76,973 sq. ft.	81,754 sq. ft.
Truck Scale Sumps	35,297 sq. ft.	12,160 sq. ft.	23,137 sq. ft.
LP/MP Vaporizer Sump	10,078 sq. ft.	- sq. ft.	10,078 sq. ft.
	<u>498,455 sq. ft.</u>	<u>339,875 sq. ft.</u>	<u>158,579 sq. ft.</u>

Area Drained to On Site Catch Basins

Area east of Truck Scales	130,318 sq. ft.	45,806 sq. ft.	84,512 sq. ft.
Area west of Kaldair Vaporizers	76,249 sq. ft.	9,066 sq. ft.	67,183 sq. ft.
Area west of Truck Scales (CB-B)	39,901 sq. ft.	10,233 sq. ft.	29,668 sq. ft.
South Rover Street Extension	12,109 sq. ft.	758 sq. ft.	11,350 sq. ft.
LIN Area	35,146 sq. ft.	- sq. ft.	35,146 sq. ft.
Rover Street Catch Basins	19,367 sq. ft.	2,561 sq. ft.	16,806 sq. ft.
Laydown Yard	17,823 sq. ft.	- sq. ft.	17,823 sq. ft.
	<u>330,913 sq. ft.</u>	<u>68,424 sq. ft.</u>	<u>262,488 sq. ft.</u>

Total Impervious Area	421,067 sq. ft.	9.67 acres
Total Pervious Area	408,299 sq. ft.	9.37 acres
Total Area Drained to Storm Drain System	829,368 sq. ft.	19.04 acres

Area draining naturally

26.55 Acres x	43560 sq. ft./acre =	1,156,518 sq. ft.
less area draining to Site Containment Sumps		498,455 sq. ft.
less area draining to On Site Catch Basins		<u>330,913 sq. ft.</u>
Net area draining naturally		327,150 sq. ft.
	or	7.51 acres
Developed area is		19.04 acres

Annual precipitation (Boston, MA)

Annual rainfall average = 43.77 in./yr. or 3.65 ft./yr.

Design Storms

Accumulation

10 year, 24 hour	5"
25 year, 24 hour	6"
50 year, 24 hour	6"
100 year, 24 hour	6" (Design Peak Storm)

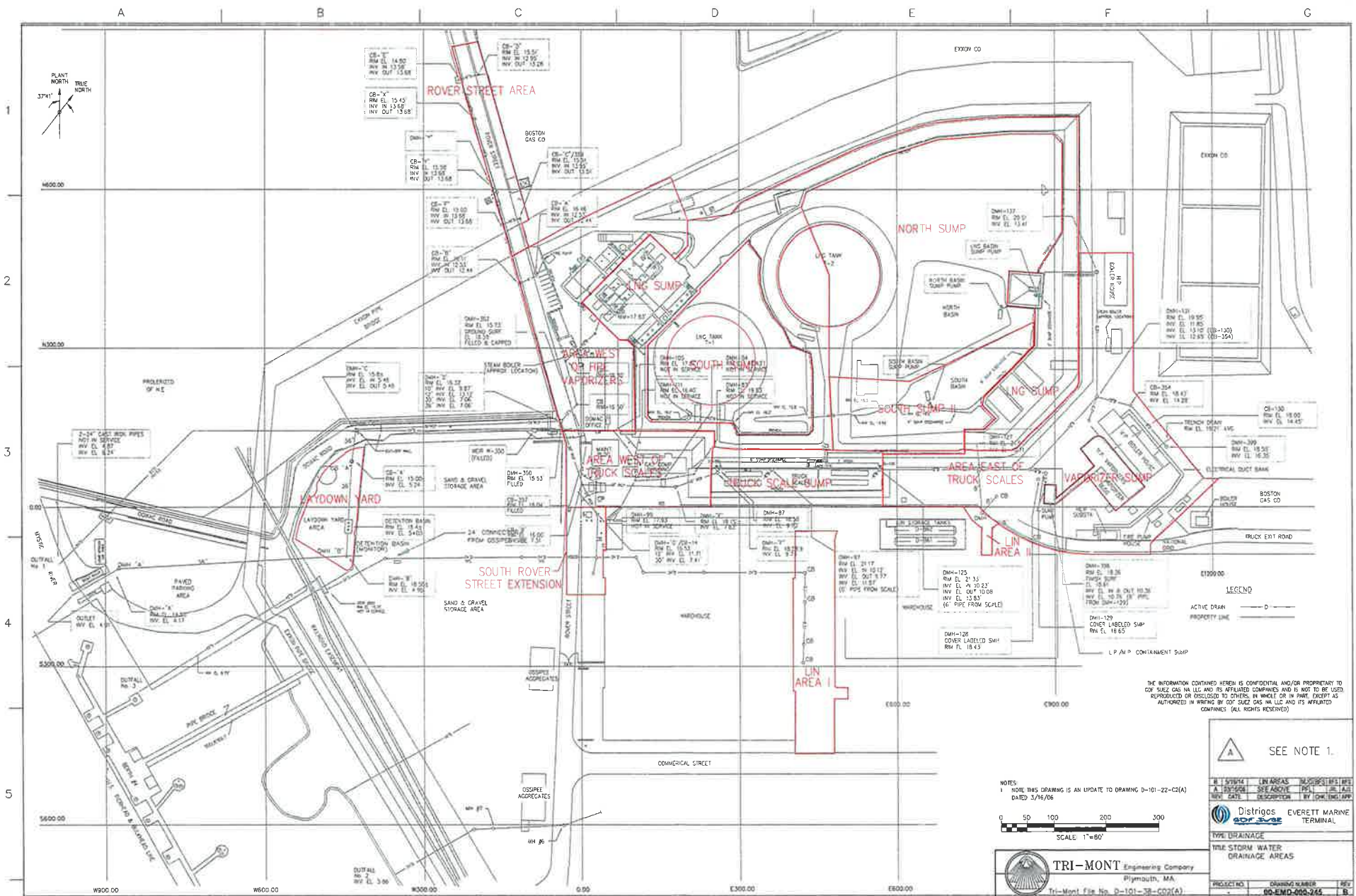
Site Runoff coefficient = 0.55

Annual Average Flow (Site generated)

equals	3.65 ft/yr
x	829,368 sq. ft.
x	7.48 gal./cu. ft.
x	0.55 runoff coeff.
/	<u>365 days/yr.</u>
=	34,120 gal/day
TOTAL	34,120 gal/day

Maximum Peak Flow (24 hours)

equals	0.5 ft/day (6"/day)
x	829,368 sq. ft.
x	7.48 gal./cu. ft.
x	<u>0.55 runoff coeff.</u>
=	1,706,010 gal/day
TOTAL	1,706,010 gal/day, peak



Attachment 2F-5

**NPDES Form 2F Rain Event Sampling
Analytical Report
Alpha Analytical
Report Date: 04/30/14**



ANALYTICAL REPORT

Lab Number:	L1408545
Client:	ERM, Inc. 1 Beacon Street 5th Floor Boston, MA 02108
ATTN:	Lyndsey Colburn
Phone:	(617) 646-7829
Project Name:	DISTRIGAS
Project Number:	0107297.04
Report Date:	04/30/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial_No:04301416:41

Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1408545
Report Date: 04/30/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1408545-01	SD-6	EVERETT, MA	04/23/14 13:00

Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1408545
Report Date: 04/30/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1408545
Report Date: 04/30/14

Case Narrative (continued)

BOD, 5 day

The WG684605-2 LCS recovery (125%), associated with L1408545-01, is outside the acceptance criteria.

Due to the expiration of the method required holding time, no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 04/30/14

INORGANICS & MISCELLANEOUS

Serial_No:04301416:41

Project Name: DISTRIGAS

Lab Number: L1408545

Project Number: 0107297.04

Report Date: 04/30/14

SAMPLE RESULTS

Lab ID: L1408545-01

Date Collected: 04/23/14 13:00

Client ID: SD-6

Date Received: 04/23/14

Sample Location: EVERETT, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate/Nitrite	0.20		mg/l	0.10	--	1	-	04/30/14 08:15	30,4500NO3-F	DB
Total Nitrogen	2.9		mg/l	1.5	--	5	-	04/30/14 12:00	41,-	JO
Nitrogen, Total Kjeldahl	2.71		mg/l	1.50	--	5	04/25/14 12:16	04/28/14 22:07	30,4500N-C	AT
Phosphorus, Total	0.128		mg/l	0.010	--	1	04/24/14 09:45	04/24/14 13:47	30,4500P-E	SD
Chemical Oxygen Demand	53.		mg/l	20	--	1	04/25/14 20:00	04/25/14 23:42	30,5220D	TL
BOD, 5 day	7.6		mg/l	2.0	NA	1	04/23/14 22:20	04/28/14 15:30	30,5210B	SE
Oil & Grease, Hem-Grav	ND		mg/l	4.0	--	1	04/25/14 07:30	04/25/14 10:00	74,1664A	ML



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Project Name: DISTRIGAS

Lab Number: L1408545

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Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG684605-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	04/23/14 22:20	04/28/14 15:30	30,5210B	SE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG684824-1										
Phosphorus, Total	ND		mg/l	0.010	--	1	04/24/14 09:45	04/24/14 13:25	30,4500P-E	SD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG685088-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	--	1	04/25/14 07:30	04/25/14 10:00	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG685216-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	04/25/14 12:16	04/28/14 22:00	30,4500N-C	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG685229-1										
Chemical Oxygen Demand	ND		mg/l	20	--	1	04/25/14 20:00	04/25/14 23:39	30,5220D	TL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG686066-1										
Ni , Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	04/30/14 07:11	30,4500NO3-F	DB



Lab Control Sample Analysis**Batch Quality Control****Project Name:** DISTRIGAS**Project Number:** 0107297.04**Lab Number:** L1408545**Report Date:** 04/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG684605-2								
BOD, 5 day	125	Q	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG684824-2								
Phosphorus, Total	100		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG685088-2								
Oil & Grease, Hem-Grav	90		-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG685216-2								
Nitrogen, Total Kjeldahl	98		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG685229-2								
Chemical Oxygen Demand	101		-		93-106	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG686066-2								
Nitrogen, Nitrate/Nitrite	105		-		90-110	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: DISTRIGAS

Project Number: 0107297.04

Lab Number: L1408545

Report Date: 04/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG684605-4 QC Sample: L1408519-07 Client ID: MS Sample												
BOD, 5 day	10	100	180	170	Q	-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG684824-3 QC Sample: L1408142-01 Client ID: MS Sample												
Phosphorus, Total	ND	0.5	0.519	104		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG685088-4 QC Sample: L1408699-01 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	41.7	39	94		-	-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG685216-4 QC Sample: L1400004-65 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	0.700	8	6.20	78		-	-		77-111	-		24
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG685229-3 QC Sample: L1408023-11 Client ID: MS Sample												
Chemical Oxygen Demand	ND	238	240	101		-	-		84-120	-		12
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686066-4 QC Sample: L1408545-01 Client ID: SD-6												
Nitrogen, Nitrate/Nitrite	0.20	4	4.3	102		-	-		80-120	-		20

Project Name: DISTRIGAS

Project Number: 0107297.04

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1408545

Report Date: 04/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG684605-3 QC Sample: L1408489-01 Client ID: DUP Sample						
BOD, 5 day	56	76	mg/l	30		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG684824-4 QC Sample: L1408142-01 Client ID: DUP Sample						
Phosphorus, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG685088-3 QC Sample: L1408699-08 Client ID: DUP Sample						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG685216-3 QC Sample: L1400004-65 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	0.700	0.304	mg/l	79	Q	24
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG685229-4 QC Sample: L1408023-11 Client ID: DUP Sample						
Chemical Oxygen Demand	ND	ND	mg/l	NC		12
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG686066-3 QC Sample: L1408545-01 Client ID: SD-6						
Nitrogen, Nitrate/Nitrite	0.20	0.17	mg/l	13		20

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Project Name: DISTRIGAS

Lab Number: L1408545

Project Number: 0107297.04

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Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1408545-01A	Plastic 1000ml unpreserved	A	8	2.7	Y	Absent	BOD-5210(2)
L1408545-01B	Plastic 500ml H2SO4 preserved	A	<2	2.7	Y	Absent	TKN-4500(28),COD-5220(28),TPHOS-4500(28),NO3/NO2-4500(28),TNITROGEN(28)
L1408545-01C	Amber 1000ml HCl preserved	A	N/A	2.7	Y	Absent	OG-1664(28)
L1408545-01D	Amber 1000ml HCl preserved	A	N/A	2.7	Y	Absent	OG-1664(28)

*Values in parentheses indicate holding time in days



Project Name: DISTRIGAS
Project Number: 0107297.04

Lab Number: L1408545
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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report



Project Name: DISTRIGAS**Lab Number:** L1408545**Project Number:** 0107297.04**Report Date:** 04/30/14**Data Qualifiers**

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: DISTRIGAS
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REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 41 Alpha Analytical Labs Internally-developed Performance-based Method.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA 2540D: TSS

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Ti; **EPA 200.7:** Ba, Be, Ca, Cd, Cr, Cu, Na; **EPA 245.1:** Mercury; **EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Ti, Zn;

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn;

EPA 245.1, SM4500H-B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH₃-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO₃-F,**

EPA 353.2: Nitrate-N, **SM4500NH₃-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,**

SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,

Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Application for Renewal of NPDES Permit MA0020010
Distrigas of Massachusetts LLC
May 2014

Appendix A

Methodology for Storm Drain Evaluation February 4, 2010

Application for Renewal of NPDES Permit MA0020010
Distrigas of Massachusetts LLC
May 2014

Appendix B

Storm Drain Evaluation Report (Special Study) November 19, 2010

Application for Renewal of NPDES Permit MA0020010
Distrigas of Massachusetts LLC
May 2014

Appendix C

Storm Drain (Special Study) Evaluation of Best Management Practices November 21, 2013